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ORIGINAL ARTICLES.

THE CONTROL OF PULMONARY DISEASE.

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THE general subject of pulmonary diseases has not received from the public, and hardly from the profession, an amount of attention commensurate with their proportion of prevalence. Our ready resignation to the seemingly inevitable results of this class of maladies is an inheritance. In the old time when a member of the family had either "slow consumption" or "galloping consumption," as they were known in popular parlance, the fatal issue was so definitely accepted, that professional advice was counted almost a superfluity, and the only channel of ministrations left to the friends was through the one effort to make comfortable, for the invalid, the few remaining weeks or months of life.

The revision in our theories of the nature and causes of pulmonary troubles has within a few years been radical; the improvements in methods of treatment have gone on more slowly. Meanwhile the proportion of deaths has increased steadily until phthisis has become the scourge of our cities. Four-sevenths of our population at some period of life suffer from pulmonary disease, while the number of deaths from this cause alone, amounting in 1880 to over two hundred thousand, is two-sevenths of all the deaths in the United States.

The improvements in the treatment of the advanced and more fatal forms of lung trouble are limited by the very nature of the disease; many patients have passed the stage of possible cure before they realize the existence of any serious trouble. But the profession now possesses means of detecting and arresting disease in its incipient stages, which make it possible to prevent the development of conditions too serious to be cured. The microscope will reveal the presence of germs before tubercular phthisis has reached the "galloping" stage, and while a professional ear may yet fail to detect any physical signs of the incipient disease. But phthisis is not like measles or smallpox to be caught in a morning walk, it does

not develop without forewarnings. The tubercular bacilli do not attack a healthy lung, nor incorporate themselves into a system that offers the resistance of normal vitality. If phthisis seems to come upon one suddenly, it is simply because its victim failed to comprehend that the previous pleurisy, prolonged whooping-cough, bronchitic asthma, bronchitis, or pneumonia was an indication of the systemic disturbance that finally culminated in phthisis. For all these pulmonary troubles are but an ascending series of results, the cause of which must be sought for antedating them all. Before the inception of any form of lung disease, there always exists some deficiency of normal breathing capacity; this diminution may be so slight as to escape detection except by the most delicate tests, but where it exists, even to a slight degree, it constitutes a primary predisposition to graver forms of lung trouble.

The immediate sequence of diminished breathing capacity is impaired nutrition. The co-existence of the two is well recognized, but poor nutrition has sometimes been counted the cause of lung disease, when it should rather have been considered the result. All effort should be directed primarily to an increase of lung power, and only secondarily to added nutrition. To reverse the process is to strike at the branches, rather than at the root of the trouble.

As soon as a breathing capacity below normal is suspected or ascertained, or when general malnutrition indicates a lessened supply of oxygen, the initial examination should be directed not to the lung but to the nostril. When the opening in the nose is over-small, mouth breathing is the habitual method of inspiration, this does not inflate the various parts of the lungs as effectually as when the air is taken in through the nostrils, nor as safely warm and disinfect the inflowing current. The test of normal nasal respiration is the ability to breathe through the nose with the mouth closed, when walking rapidly or when asleep. An examination of the nasal passages of one who is addicted to mouth-breathing will show partial occlusion of one or both nostrils. When such a condition exists, it usually produces catarrh, enlarged tonsils, ear trouble, pain in the eyes and forehead, spasmodic asthma, and some

degree of impairment of lung power, generally manifest in the apex of one or both lungs. This deficient expansion of the tops of the lungs, whether it is found in children, or develops later in life, always constitutes a predisposition to pulmonary disease.

Recent improvements in the method of treating the nasal organs have rendered the enlargement of the passages simple, painless, and effectual. Every mouth breather should embrace this easy means of correcting a habit fatal to sound health.

But after obstructions in the nasal passages have been removed, or a too small orifice enlarged, we have then restored only the possibility, and not the power, to breathe normally. Even when the air supplied through the nostrils is again abundant, the lung cannot utilize an adequate amount, owing to the chronic habit of non-expansion. The continued mal-nutrition also exerts a reflex influence to keep the lung enfeebled. At the first diminution in the power of breathing, the lung receives less air, the blood less oxygen, and the body less nourishment. The lungs are the bellows that keep burning the fires of life, any decrease of their activity permits these fires to burn low. The sum total of vital power always diminishes before any local disease betrays itself in the lungs.

The most generally accepted means of strengthening weak lungs has been change of climate. Physicians are not agreed upon the conditions to be sought for in this treatment, nor united in opinion as to the best manner of seeking them. A warm and equable climate is recommended by some, while, since the development and general acceptance of the germ theory of consumption, others maintain that a warm climate, especially if moisture be added to heat, is dangerously propitious for the evolution of bacilli, and hence that a cold climate is needed to arrest their development.

Leaving to the contending advocates of climatic treatment the discussion as to the best place, and granting that there may be some location so favored that it is neither too warm, nor too cold, too high, or too low, but aseptic and tonic, granting even all that is claimed for climatic influence by the most enthusiastic, there certainly remains a very large majority, among the four-sevenths of our population which is afflicted with pulmonary disease, to whom change of climate, involving the relinquishment of business, and the expense of travel and hotel life, is financially an impossible remedy, and for whom some other treatment is necessary. Even among the limited number, who are at liberty to try a

change of climate, there are few to whom any other course, that promised as good results, would not be a boon. The discomforts which travel brings to these invalids are countless. Exiles from home and friends, forced to live in poor hotels, to be cooped up in small rooms, illy-ventilated and insufficiently heated, parched with fever, racked with cough, craving delicate food, and able to get none even palatable; if they go south they wish they had tried the north; if they travel north they regret not having turned their faces southward; if they go to the islands of the sea, they long for the mountains; if to the mountains they dream of the sea.

These patients are dying from sheer inability to perform the act of respiration with sufficient vigor to maintain life, even the aid which altitude is supposed to afford, through diminished atmospheric pressure, is too little, materially to lessen their respiratory disability. The air of Paradise, itself, could not heal lungs that lacked the power to inhale it.

As an aid to restore the normal breathing capacity in lungs that have become enfeebled, the pneumatic cabinet has proved itself invaluable. In the hands of a competent operator every respiratory act possible to healthy lungs, may be artificially induced in crippled ones. The natural action may be stimulated if feeble, or restored if it has been temporarily lost. As this treatment offers the best results of climatic change, with none of the multiplicity of its evils, it justly claims careful inspection from the profession, and is already attracting the intelligent attention of the public.

The pneumatic cabinet looks not unlike the body of a small Brewster coupé. When a patient is seated behind the glass front, with the door closed, he is practically in an air-tight box. The atmosphere about him can, at the operator's pleasure, be made rare or dense, while, through a tube inserted from without, any vapor, spray or air desired may be conveyed to the lung of the cabinet occupant. These simple operations, robbed of their mechanical complications and professional technicalities, comprise the elements of power inherent in the cabinet. The combination and interplay of the compressed or rarefied atmosphere, together with the multiform remedial and germicide agents, that flow into the lungs, makes it possible to produce an almost infinite number of finely graded conditions, that shall approximately reproduce in the lung an ideal action.

The pneumatic cabinet is no longer an experiment, but has already become a recognized means

of treatment, that is favorably changing the statistics of pulmonary disease, as antiseptic methods immediately improved the statistics and lessened the dangers of maternity, and as antiseptic remedies and ethylic germicides have lowered the per cent. of deaths from contagious and infectious diseases.

The fact that as yet only a limited number of physicians are using the cabinet, does not impeach the statistics of good results, which the few men who are using it, daily record in their case books. The incredulity with which the reports of the successes have been received, or the persistency with which they have been ignored, is in no sense an argument against the cabinet. An equally crude skepticism was displayed over the record of statistics offered by the first operators in antiseptic surgery; in spite of this opposition, the triumphs of antiseptics have revolutionized the entire field of surgical and obstetrical science. The final verdict for or against an instrument, or a method of treatment must be given by those most familiar with its operation and its statistics. No other argument can stand against the bald statement of per cents. A physician who has once made a practice of using antiseptics in surgery, never gives them up, which is certainly argument unanswerable in their favor; and no one who has treated pulmonary diseases with the pneumatic cabinet would attempt to treat them without its aid, what more convincing proof of its value could be required.

When a patient is in the cabinet, the air about him may be rarefied, so as to produce upon the lungs the same effect of expansion that is caused by an elevation; the degree of rarefaction measures the number of feet of altitude. The cabinet affords at the same time an additional element of advantage. At an ordinary elevation, the patient, who enjoys the diminished atmospheric pressure, is forced to breathe the same rarefied mountain air; the consequent acceleration of respiration, and the increased action of the heart bring attendant disadvantages; if the elevation is too great, one incurs the risk of hemorrhages. But, in the cabinet, the lung expansion induced by lessened pressure, is supplemented by a supply of air from outside, which has the greater density of the atmosphere at sea level. It is as if a person on top of a mountain a thousand feet high should breathe through a tube that reached down to sea level. Thus we may produce the needful lung expansion, and at the same time induce the all important fuller respiration.

The increased lung power acquired in a single cabinet treatment is retained from six hours to

long periods of time, according to the particular condition of the patient. A series of treatments renders the temporary power permanent.

To prevent or arrest germ development strict antisepsis should be practiced. The cabinet and all its appurtenances must be disinfected for each patient, the tubes he uses should be kept in antiseptic solution, and the air he breathes saturated with a germicide. It is better still if the office can be made thoroughly aseptic, with bare walls, uncovered floor, and no upholstered furniture.

If we cannot as yet name any germicide that will rapidly destroy bacilli in the lung, we may, with the agents now at our command, at least render the conditions so unfavorable for their development, that nature, thus aided, may resist their otherwise rapid encroachments. The germicide is not the only element, perhaps not even the most powerful factor, in cabinet treatment to overcome germ disease. The increased amount of air and blood in the lung, and the quickening of the general circulation, which are its results, bring the lung tissue and the mucous membrane to a more healthful condition, and in such proportion increase the natural tendency to resist germ infection. The circulation of blood in the lung is not dependent upon the heart alone, for the amount of venous blood drawn into the lung is increased in proportion to the completeness of the act of inspiration, and the amount of oxygenated blood flowing back to the heart depends, in no small measure, upon the strength of the act of expiration.

In natural breathing, the tidal air, that is changed in a single inspiration, is less than one-tenth of the whole amount in the lungs. In a forcible expiration, in a deep sigh, or under excess of excitement, the amount removed is somewhat increased, but even when the reserve air is expelled by these more vigorous methods, the residual air, still remaining in the lung, which cannot be diminished, by any means, not fatal to life, is more than one-half of the full volume. Whenever the normal lung power is decreased, this residual air is not purified rapidly enough to maintain the healthy condition of the lung tissue, or of the mucous membrane, and then the victim is in constant danger of germ infection. It is believed that bacilli never attack healthy mucous membrane, but are rather themselves destroyed by contact with it. By the cabinet action known as "residual air expansion," the average amount of unchanged air is diminished, the circulation of air and blood in the lung is accelerated, and the mucous membrane stimulated to healthful activity.

In tubercular infection there is, of course, a stage of the disease, beyond which neither climate nor cabinet can induce recovery; but, even in this advanced condition of lung destruction, the cabinet will do more than any other agency to mitigate suffering and prolong life.

Clinical experience has led me to believe that all portions of the lung which had been infiltrated by bacilli, before cabinet treatment was begun, will eventually be lost, and a cavity consequently ensue. But the process of losing a diseased lung, which, without the antiseptics of cabinet treatment, is undergone with conditions of progressive decline, involving blood poisoning, with its daily consuming fever, its night sweats, racking cough, profuse expectoration, lack of appetite, loss of flesh, and decline of strength, may, with the aid of the cabinet, be endured without discomfort. Patients while losing portions of tubercularly infected lung have even gained in weight, and in general good health. In all such serious cases, the prognosis must depend upon the relative amount of lung tissue which remained uninfected at the time treatment began. The cabinet will arrest the development of bacilli, will bring away the diseased portions in an antiseptic process, and leave a healed cavity, with healthy remnant of lung; but even then it cannot save the patient if the parts of sound lung remaining, are too small to maintain a degree of respiration that does not fall below the quantitative necessities of blood-oxygenization, waste repair, and tissue-building. The proportion between sound and diseased parts of the lung, cannot be accurately determined by any physical examination; for the actual cavity may be but a small part of the potential one, that may prove itself too large to admit of hopeful prognosis. The real condition can be estimated only after a series of cabinet treatments has in some measure, cleared up the lung, and made plain the lines of demarkation between healthy and diseased tissues.

The great function of the cabinet is not, however, to deal with the more serious and fatal forms of tubercular phthisis. Its most brilliant results have been attained in the line of prevention. In arresting the development of pulmonary disease, before it reaches so pronounced a stage, the pneumatic cabinet is without a rival.

Speaking not as a matter of opinion, but from actual clinical experience, the cabinet, properly handled, will induce good respiration in the bottom of a lung, in the top of which there is a cavity; will expand, to a good working capacity, the lung blanketed with thickened and adherent pleurae; will clear up in weeks, instead of the otherwise

long months, the sore, aching, threatening spot left as the legacy of an unresolved pneumonia, and will control and eliminate the tendency to hemorrhage. A recent pleurisy with its lame, contracted side, the hacking cough, shortness of breath, plastic or serous effusions, is equally amenable to cabinet treatment. With this instrument also, a patient suffering from bronchitis may be given speedy and permanent relief.

With children who inherit a tendency to pulmonary disease, or whose too rapid growth makes a greater demand upon the lungs than these organs are able to meet, this gentle lung expansion raises the sum total of vital power to high-tide level again.

By reflex influence, the effect of cabinet treatment upon a weak or diseased heart is most favorable; this, for the simple reason that whatever aids respiration improves the circulation.

It may seem to the uninformed, that too much is claimed for the pneumatic cabinet, or that its advocates aim to reach, by its aid, too great a variety of diseases. If the incredulous ones will but go back to first principles, they may recognize in the cabinet not a universal panacea, but a strictly scientific instrument, which is doing exact work within definite limits. With it the physician seeks to effect one result—to restore, or to produce a normal capacity of respiration. The number of combinations employed by the operator are simply efforts to meet judiciously the various forms in which defective breathing manifests itself, while the numerous diseases, and predispositions to disease, which the cabinet successfully reaches, come within its province on the recognition of a common cause for all this class of pulmonary troubles, which cause the cabinet has proved itself all powerful to correct.

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ONCE MORE ABOUT THE DETERMINATION OF SEX.

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PART I.

"From vulgar bounds with brave disorder part,
And snatch a grace beyond the reach of art."—Pope.

MANY of those who adhere to the hypothesis that it is the hygienic standard which determines the sex, do it out of no other reason but because by *vis inertiae* they feel disposed to settle on any one theory, in order to have done for good with the question; and there is something realistic, indeed, in the idea that it is simply the degree of sexual health which comes into play; so

that all those must be easily won by it who are easily won by appearances. But aside from the circumstance that the theory is not exactly a new one, having been entertained already by the Arabian physician Rhazes, who lived a thousand years ago, it clashes with the most notorious facts of daily observation and occurrence. It is a very common incident in matrimonial life that a perfect giant of a man, with a sickly frail little bit of a wife, begets nothing but girls, and strong ones, at that, while a feeble specimen of the strong sex who by his Eve, in a family feud, could as easily be tied and hung to the wall like a chromo, as King Gunther was by his wife Brunhilde, exhibits a breakfast-table full of boys which outnumbers any male litter in the country.

The problem of sexual heredity, it would appear, therefore, cannot so easily be solved as by referring simply to an hygienic standard.

To my mind it is an altogether erroneous standpoint in this matter of determination of sex any way, to confound sexual predominance and a powerful frame or plentiful muscular development. One can see heavy men, which in an assault upon a fortress every commander would judge fit to stand foremost, who are sexually of the lowest order, I mean with reference to impetus as well as to prolonged service; they are indifferent to women and cool in their presence, be this even an intimate one, and they treat matrimonial matters as they would the renting of a house, making it even a subordinate part of housekeeping. There are on the other hand found individuals with whom according to all appearances nature husbanded her forces, and undoubtedly did so with regard to skeleton and muscular bulk, but who exhibit such a considerable *virtus* as to sexual faculty, that it seems as though nature, with them, prefer the differentiation of all protoplasma into spermatozoa, and who are in their intercourse with women headlong, hotspurs, and—very often dupes.

Among animals we have striking analogies. The elephant is a shy breeder, but there is no lustier husband in the world than the sparrow. And the old Roman adage, *omne animal post coitum triste*, is not borne out by the rooster in a chicken yard; he is never prouder, and never crows more cheerfully than after having attended to his multiple duty. In the vegetable kingdom even nature keeps up the peculiarity; whoever has any experience with orchards, knows that it is not the bulkiest trees which are the most prolific bearers. Most striking instances of this fact we have in orange-growing; our showy seedlings with high stretching tops and far extending

branches are very prone to bear only alternately, every second year, while our close growing budded trees, hardly ever so slightly, not only bear sooner, but choose to exhibit the golden fruit in the dark green foliage year by year.

In the sixteenth century when the progressionists among the doctors of medicine thought that the freeing from the fetters of traditional booklore were wrought by a boundless sway of reformatory imagination, the most prolific one among these synthetic enthusiasts, Paracelsus, got up in his sinciput the idea that nature, in forming a new individual, takes from every part of the parents a pinch, so that monstrosities occur by a mistake of nature in this pinching business, nature either skipping a spot or making herself guilty of nimity, the one resulting in deficiencies, the other in redundancies of organization, a portrait to which the gossip-pharmacist of Theophrastus, in making up out of his myriads of bottles a shot-gun recipe, it would seem has sat.

The assumption that sex is simply determined by an hygienic quality which on a physiological state fair—a kind of baby show of adults—would from the physiologists command a premium, is the hypothesis of Paracelsus in a new dressing; it is reflected in it more on the stamens than on the pollen. But as surely as an individually poor offspring of a fine stock may have descendants in which the virtues of his ancestry strike wonderfully home, it is not barely hygiene which in matters of procreation is the determining point. And it is not even physiology alone!

There is a line where nature steps beyond the laws of physical relation, although never getting in conflict with them and allows herself to be ruled by other influences, and the domain of procreation, if any, is situated on the other side of the mechanical boundary. It is its transcendental part.

This does not mean to say that man is anywhere cut adrift from physiological laws. But it lays claim to the principle that there is a blending of these physiological laws with those that are not traceable to microscope and crucible.

Spermatozoon and ovum are to be taken into account as inceptive individualities; they have their own selfhood. They are not, however, as Paracelsus thought and taught, a kind of collection of accumulated quintessence, but they are *in nuce* man himself, his mental as well as his bodily whole, representing, or, as it were, repeating his general being as well as his special disposition at the moment of coition. And this is the cause why what a child is and when grown will be, depends not only upon the general qualities of his parents, but also largely upon the particular

bodily and mental condition they were in at the moment of copulation. There are certain points in physio-psychical heredity which will more or less ever show themselves as upshot of the general biological laws. One of these laws is that the intellect inherits from the mother, the temper from the father, so that we may set it down as a bare impossibility that a genius be ever borne by a silly woman, or a hotspur start from a phlegmatic stock. An intelligent woman, if not well mated but linked to, as Shakespeare says, "A man so faint, so spiritless, so dull, so dead in look," may not succeed to do what she would be able to do under more favorable circumstances; but in a stupid mother the very conditions of the procreation of intelligent children are failing, and as Schopenhauer, to whom we owe these observations, says, "the worst natural legacy of a man," and one, moreover, as to which he cannot assume the position of a recusant, is "to have a goose for a mother, and a sluggard for a father." But from observation on a domain most intimate to me, because of my immediate access, I am inclined to believe that the degree of harmony attained by the married couple at the moment of procreation, or even the passing love they bear to each other at the moment of coition, is of influence on and helps determining the bodily and mental condition of their offspring. An harmonious mixture in the child of the divers nature of the parents is conditioned by the harmoniousness of the sexual act, while a discrepancy in the sexual participation at the moment of coition will determine in favor of the more active molecules. This, then, is the agent which determines the sex: it is the superiority of molecular liveliness in either the spermatozoa or the ovum which settles the point. When this molecular liveliness is greater in the spermatozoa, the organizing power obtaining in these will gain it over that of the ovum. When on the contrary the molecular liveliness of the ovum is the greater, it is the organizing power of the latter which will gain it over that of the spermatozoa. But it would be an erroneous conclusion if we were to deduct from the superiority of the liveliness of the semen that boys must be borne, while the ovular superiority, in organizing power would cause a female offspring. The conclusion which follows from our premises is just the reverse. For the molecular liveliness being identic with sexual desire, the superiority of the male organizing element does not find its expression except in a female. The spermatozoon is the reiteration of man. Well, and what is it what man, being sexually alive, wants? It is a girl, for sure. On the other hand a girl, being sexually in an

agreeable mood, is sure to not be satisfied with anything short of a boy. Hence the difference in sex; as in electricity each pole is tending to its opposite. Hence the common observation that first children are so frequently girls. The sexual predominance in the incipient stage of matrimony is mostly and naturally on the side of the man. If not congenitally the male mate is phlegmatic, from the circumstance that in woman the sexual consciousness is more or less only beginning with sexual intercourse, it follows as a rule, with first children, that the molecular liveliness of the spermatozoa is superior to that of the ovum.

Sexual health in procreation is, no doubt, a great thing, but it is not the point at issue in determining the sex. It is, therefore, I believe, a misconception to explain the observation of there being a greater probability of boys being borne in case the male be husbanding his forces. An infrequent copulation may have this result, indeed; but more as a sequel than as a consequence; a husbanding of the forces of the male in the determination of sex is of consequence only inasmuch as it has its corollary with it, the corresponding tendency of the female to play the initiatory part. If the indifference in the male does not create in the female an increased craving for a boy, the temporizing of the male will be of little influence.

Our deduction must be, therefore, that man, so far from being excluded from all sovereignty in the reproduction of his own, has it to a certain extent in his power to raise the sex he wants. But this, as a matter of course, not as a velleity, but only by accommodation to the laws of nature. A bachelor, all by himself, cannot decide the question, nor a girl, single and solitary. It is the mating which does it, and does it not only with general reference to the physio-psychical proportions which the procreating couple bear to each other, but with special reference to their physio-psychical behaviour proportionately to each other, at the very moment of the ovum and the spermatozoon coming in contact with each other. For it is at this very moment that the sex, and more than that of man, is determined. Whosoever would undertake to deny this would be impelled to deny all laws of heredity, and the character of the development of the fœtus being that of an evolution. Embryology, although not being able to detect a differentiation of sex at so early a stage of the development of the ovum, teaches sufficiently by the whole theory of the latter, that subsequent to fecundation all occurrences are nothing but a growth, the nature of which is predetermined by man and wife, the bodily and mental constitution of the match generally, and the special manifesta-

tion of either at the moment of coition; this is the germ of all that comes after, and all that comes is according to this germ. A denial even that sex is determined at the moment of coition, or rather, when the spermatozoon enters the ovum, could not help landing at our starting point. For, if sex is determined at a later stage of development, there must be some drift the one or the other way, well, and this drift is precisely the essence of my theory. But it will be difficult to justify the assumption of a later stage of the determination of the sex than at the very moment of copulation, respectively its realization in the uterus, or, may be, the Fallopian tubes.

The more we try to penetrate the mystery of procreation, and the more foothold we gain in doing so, the more barbarously fallacious becomes the doctrine of the Moslems who deny to woman a soul, declaring her to be no more than the soil which receives the semen *hominis*, and plays with regard to this the same part which our garden soil does with regard to cabbage and turnip seed. Even if we were to let pass such an analogy as more than an illustration, the simile would not hold good, because the analogy is wrong. The analogy of the genesis of man in vegetative growth is not in the formation of a new plant, but in the unfolding of fruit. The female organs, therefore, if not more, are of equal generative moment as the male ones. According to all appearances, even, as it is in the woman where man is organized, the mother of a man is for his manly qualities a great deal more important than his father, all the truth of the fact notwithstanding that much can be spoiled by "A poor, cold, unspirited, unmannered, dishonest, unaffected, undone fool" (Beaumont & Fletcher), giving occasion to the complaint of Milton: "These are the product of those ill-mated marriages." And there is one further circumstance which speaks against the said Moslemite analogy. The germination of the seed in the soil takes place perfectly independent of the latter. It is an important discovery of modern physiology of plant life, that the first growth of the germ of a seed needs organized nourishment. This is the reason why nature in the seed provided not only the germ of propagation, but also the first nourishment, and accordingly, nature, on the lower stages of her vast domain even, observed equality of rank between the passive and active agents of procreation. The soil in the germination of seed serves no other purpose than to supply moisture.

Ignorant poetry, that second-class phantasy in golden-edged 8°, which exults more in a triumphant rhyme than in correct ideas, has done much

to muddle the brains with regard to our topic. According to that spurious wisdom manliness must show itself not only in male offspring, but also in a long beard, and "sleepy matrimony" is unfavorable to the procreation of manly offspring. Now statistics show not only that among the illegitimate children there is a surplus of girls, but also an excess of death rate, idiocy, etc., and this not only on account of the less care which is bestowed upon them, but because of the metaphysical disadvantages under which their keel was laid, and their development brought to perfection. It is the psychical reluctance in the mother, the over-anxiousness in the father, the stealthiness of the whole process, from beginning to end, which tells upon the offspring, and can hardly ever fail to do so. And as to the bushy beard, one finds it nowhere more prodigious than among the hectic.

According to this spurious kind of poetry such a thing as a virago would be an impossibility. But the above mentioned medical theory of procreation must be satisfied, on account of its thesis, to be ranked with this poetry.

A very illustrative example of these considerations confirming them is the family of old Bonaparte. The father was a quiet sort of a man. But his mother was a vixen; she not only bore the greatest soldier of modern times, but nothing but boys, and the monotony of matrimony was so little of bad effect upon the procreative avocation, that the great Napoleon was not the eldest but the second son. And whoever chooses to make observations on this statistically yet much neglected field, will find the average confirmation which fully settles the question about the theoretically decisive point; it is not infrequently in large families that the eldest child is a girl, but the younger boy, or girl, the more prominent child, bodily stronger and mentally better developed.

Man is a curious sort of a being anyway. All progress in embryology was obtained by experiments upon animals, and all our physiological amplitude, if not certitude of knowledge rests on animal analogy. But when this animal analogy is being extended into social reasoning and discussion of matrimonial relations, then the enlightened physician even, or, at least, very many of those who call themselves enlightened, and may boast of a certain title to do it, are shocked, offended, and want to keep up an unphysiological psychical selfhood which elevates all human procreation to self-styled divinity.

But that does not make things different from what they are in reality. Such silly extravagance impairs only the procreative faculty of man, its sci-

entific scope, so to say, and natural dignity, and delivers up to casualty and hazard the most important function of the whole individual, mind and body, the very fountain of his material and spiritual being, and the source and deepest origin of his happiness.

It will not cease to be difficult to penetrate the mystery of our becoming what we are. But the only chance we have to achieve it is the very opposite road of our present social highway: instead of by dirty pruderie and dark-wordishness which are preferred, zealous to misinterpret and conceal, and by equivocal language to tarnish our civilization, success is promised by chaste investigation and lucid discussion, eager of clear consciousness, and unabashed by it.

In the circular about a public sale of fine stock of thoroughbred Jerseys which I received the other day, mention was made and pedigree given, of a male that stands at \$500—a cow, and whose owner, a Mr. Burnham, refused \$10,000 for him. Similarly fine stallions have been paid enormous sums, and a stock breeder, than mate a nobly born female in his stables to a scrub, would rather send her to the shambles. And it would arouse his utmost indignation if any of his fellow stock breeders would be less conscientious in his avocation; the lack of money interest could not stamp out his feelings of professional propriety and natural decency. But when a nobly born girl, I mean to say not of name, what man foolishly calls noble, where it may happen that one scrub crowns the other, but one of the rare feats of nature which by their bodily perfection and mental gifts are an approachment of the ideal woman which lives in our hearts as the image of procreative accomplishments; when, I say, such a model of the best that nature can bestow is mated to a vile, physically, and psychically sordid consort, he is a cool looker on; and if he happens to have such a daughter himself, he will brutishly slight the inborn virtues in a loving swain, and force the rare bloom which nature and law gave in his power into a union with—greenbacks, state bonds and railway shares!

It was a Jesuitic trick of certain moral theories to draw the sexual question within the reach of their doctrine, exterritorializing it, thereby, from its natural domain. The wily originators of those theories who played this trick to society, knew well enough that thereby they would strengthen their grip upon the masses. But nature is bound to hold her own, and medical science is the one which is entitled to vindicate for mankind its most important topic of free secular discussion; only by attending to this point of all points the

physician goes to the root of all disease and misery.

As I said before, the matrimonial relations which determine the sex are not simply physiological ones. It is a great deviation, therefore, from the right road, to interpret the relations in a married couple and the procreative share of either by the labia minores and the clitoris or the *glans penis* and the testicles, or to undertake to determine by their proportional hygienic condition the result of the coitus; they are symptomatologically of account, but not as to the genesis of the process. It is also a mistake to see in every cerebral velleity the sexual desire which constitutes the determining agents in the proportion of sexually forming power. The sexual desire which counts in procreation is ganglionic, not cerebro-spinal, and although the encephalic ideation, as the outcome of the stirring of the great sympathetic, may be a correct sign of the latter, it may as well misinterpret it, and bear to the real mind of the individual the same proportion, as a morbid craving does to the healthy instinct of nutrition.

There is no individual in the world can benefit mankind more, or do for its welfare a greater service, than an intelligent, high-minded woman by selecting the right male consort for herself, and breed children. She is, as it were, the Pandora box of human greatness and happiness, because similarly as an army without a leader is nothing but a powerless, stupid rabble, so all mankind, without the leading minds which by their order and ideas direct destiny, is a helpless, sordid crowd. But as the world goes, our women which would be most apt to bestow such men upon the future generation, have a different ambition. It would, by the way they act, appear as though there be no men any more worthy of their association, so that they give room to the morbid fancy to be men themselves, and abandon for literary and social trumpery and the dream of temporal individual brilliancy the eternal glory of mothers, the meritorious and admired source of something grander than they ever directly can be themselves.

Strange égarement de bon sens: when a woman gets it into her head to stand forth for what she calls the rights of women, the first thing she does is, that she turns away from her sisters, and becomes jealous of the profession of men!

And then there is in womanhood a special metaphysical mistake about the very doctrine which fosters political ambition. They are envious of man's social predominance, and get into a fit of rage when some one of their many unskilled adversaries, as a reason of its propriety, contends the cerebral inferiority of the female encephalon.

And well they may get angry, for this reason—*lucus a non lucendo*—has its origin in most cases in an inferior masculine brain. But there is a difference for all that, which not only dooms the so-called women's rights movement, but explains its everlastingly frail dimensions. The difference is, however, not a cerebral one; as it is from his mother's side that the genius derives this principal condition of his being, and the father of the German poet, Goethe, for instance, was as indifferent an intellect as the children of his wife, the cook Christiane Vulpius. How can it be, that men have brains, if there are no mothers to get them from?

There is a difference, but it has its origin deeper in than the encephalon; it is a difference not of the intellect, but of the temper; a difference not of the passive, but of the active agencies of mind.

The difference is ganglionic.

But also this difference, so far from being a qualitative or quantitative one, is only one of kind. It is a standing difference, which cannot be changed by any training or educational contrivances; it is constitutional and as such expressed by nature in the very foremost differentiations of its organisms. The nature of woman, her mind as well as her body, is of a receptive kind, that of man is productive, and if in the sexual organs this difference has found its expression only in a bodily differentiation, it plays over for all that on the mental domain, and we can verify it here: be it ever so much that a woman can learn, it will never be but trifling what she will invent. "A wise man will make more opportunities than he finds" (Bacon). But a woman, than for combat, is rather made for the art of dignified accommodation to given circumstances: "The art of our necessities is strange that can make vile things precious" (Shakespeare). Man overleaps most opportunities of the enjoyment of his surroundings: "What a deal of cold business does a man misspend the better part of his life in" (Ben Johnson). Women on the other hand, are in their majority, "contented with little and catty with mair" (Burns), and ready to make true the saying of Wordsworth: "Love betters what is best." And however women try to come into power, the old ways will finally win it always again over the new road: "Grace in women gains the affections sooner and secures them longer than anything else" (Hazlitt) adorned with that they are, "Charm to my sight, and cordial to my mind" (Dryden).

History confirms all this bountifully, and the argument is futile that history cannot bear testimony in this matter, because women thus far were not free. There was a time when man was not free either, and a great deal less free than

woman is now, but it was just the time when he was most inventive. "Who would be free themselves must strike the blow" (Byron), and woman when she really wants a thing is sure to cheat the devil and his granny to boot, so that the "dreadful slavery" woman is in at present cannot be an obstacle to show the entire faculty of her mind, and prove by that, if she can, that there is more in her share than to form the rear when man takes his place in the van.

MEDICINES HAVE TWO SEPARATE ACTIONS.

By E. D. N.

THE controversy between the Old and New Schools of medicine appears now to have narrowed down to a mere question respecting a *name*. Its present position was defined in the celebrated resolution passed in the year 1881 by the Royal College of Physicians in London, and which reads as follows:

"While the college has no desire to fetter the opinions of its members in reference to any theories they may see fit to adopt in the practice of medicine, it nevertheless thinks it desirable to express its opinion that the assumption or acceptance by members of the profession of designations implying the adoption of special modes of treatment is opposed to those principles of the freedom and dignity of the profession which should govern the relations of its members to each other and to the public. The college, therefore, expects that all its fellows, members and licentiates will uphold these principles by discountenancing those who trade upon such designations."

That is, more succinctly: "You may, if you choose, practice what is known as homœopathy, but you must not call yourselves, nor allow yourselves to be called, homœopaths."

In accordance with the spirit of this admonition Dr. T. Lauder Brunton, examiner in materia medica in the Royal College of Physicians, published last year, at the end of his book on Pharmacology an "index of diseases and remedies," containing a great number of remedies, to be used in small doses and in the same diseases for which they are recommended in the homœopathic text-books—but without making any mention of homœopathy. Whereupon a very loud hue and cry was raised by some of the advocates of the system, and kept up until Dr. Brunton, in the preface to the third edition of his book, was driven to make some remarks on homœopathy, in the course of which he says: "The mere fact that a drug in small doses will cure a disease ex-

hibiting symptoms similar to those produced by a large dose of the drug, does not constitute it a homœopathic medicine."

This is a strictly accurate assertion. The term "homœopathy," as at present applied, is a misnomer. It was invented by Hahnemann to express what he supposed to be the *modus operandi* of his remedies. Whoever will read Hahnemann's writings on medicine will find that all the symptoms observed in the provings or experiments with drugs in health, by whatever doses, large or small, they may have been produced, are arranged together, and all are indiscriminately to be made use of as *similars* to the symptoms of the disease for which a remedy is sought. It is very true that opposite symptoms are found together as symptoms of the same drug, but the *doses* which produced these opposite effects are not thought important, indeed are very rarely stated; and all these symptoms, however contrary to each other any of them may be, are to be taken as *similars*, when we are seeking the medicine to be given. For example, *opium* is to be looked upon as equally a similar to excitement of the brain and to coma, or to diarrhœa and to constipation. *Nux vomica* is equally "homœopathic" to spasms and to paralysis. *Digitalis* to suppression of urine, and to enuresis, and so on of all drugs.

In short, it is perfectly clear that the *dose*, as well as the *drug*, was looked upon by Hahnemann as *acting similarly* to the disease, and this belief was the reason why he called his method of treatment *homœopathy*. It was the paradoxical aspect of the aphorism—*similia similibus curantur*, "like actions of disease are to be cured by like actions of drugs"—in which the above notion was formulated, that led, in conjunction with the doctrine of infinitesimals, to the scornful rejection of that method by the great body of the profession.

Fourteen years ago, however, in 1873, an important step was taken in advance of Hahnemann's position. This consisted in the discovery and announcement, by Dr. William Sharp, that "medicines have two separate actions upon the healthy body, in large and small doses respectively, the one the opposite of the other." The acknowledgment of this fact is an acknowledgment not only contrary to Hahnemann, but it is also *contrary to homœopathy*. For since the fact holds good both in health and in disease, it follows irresistibly that *if the action of the larger doses is homœopathic or similar to the disease, then the action of the smaller doses of the same drug is antipathic or contrary to the disease*. The aphorism *contraria contrariis cur-*

antur is substituted for *similia similibus curantur*. This involves no condemnation or abandonment of the treatment of disease known as homœopathy, but instead the method is placed upon a truer and firmer foundation than it was by Hahnemann, and *it may now be adopted by every one without being called by the name he gave it*.

This law, or general fact, that, independently of a condition of reaction, a small dose of a drug produces symptoms precisely the reverse of those which follow from a large one—is the basis of what Dr. Sharp has termed *antipraxy*. If not yet universally accepted among homœopaths, it is fast gaining ground, and no attempt has ever been made to refute it. Your journal has often referred to the same idea, when speaking of "the dual action of remedies," as constituting the real foundation of New School therapeutics. The editors of the *Monthly Homœopathic Review*, commenting upon Dr. Sharp's paper in their number for August last (from which most of the preceding exposition is taken) express their agreement with him in the following terms: "a medicine—which is selected on the ground of the similarity of the symptoms it evokes (when given in large doses to a healthy person) to those of the disease to be cured, probably acts upon the part antipathically; the probability of its doing so being rendered stronger by our knowledge that if given in health in doses similar to those prescribed in disease it would produce symptoms opposite to those it excites in large doses. The selection, in short, is homœopathic, the *modus operandi* antipathic."

It may, indeed, be true, as these same editors remark, that, for clinical purposes, this "interesting and suggestive fact teaches us nothing"—that "it gives us literally no help in selecting our medicines." But might it not give us very important help in another direction—in that, namely, of conquering the prejudices of our adversaries, and bringing about the universal acknowledgment of what we believe to be a great and beneficent principle? Ever since it was coined and put forth by Hahnemann, the word "homœopathy" has acted on the *soi-disant* "regular," with his rationalistic conceptions, like the matador's red flag on a bull in the arena. Tell him that a drug, given in minute doses, will remove a diseased condition simply because of its "homœopathicity" to that condition—*i. e.*, because it has the power of producing a *similar* condition in a healthy person—and what he calls his "common sense" instantly revolts from the assertion as a self-evident absurdity. But tell

him that the reason of its curative action lies in the fact—which he can at any time demonstrate for himself—that large and small doses of the same drug, when given to a healthy person, produce exactly *opposite* effects, and you will probably set him experimenting, with the not unlikely result of making him a convert. It seems certain that the term “homœopathy” will never be recognized by the Old School as one belonging to scientific medicine. It is almost equally certain that Hahnemann would never have thought of adopting it, if he had been aware of the fact discovered by Dr. Sharp. Is there, then, any good reason (apart from whatever popularity it may possess among laymen, and its consequent value as a “trade mark”) why it should not be discarded in favor of some more appropriate and inoffensive designation?

RETROSPECTIVE THERAPEUTICS.

BY ALFRED K. HILLS.

Ethereal Oxygen.—Dr. Richardson describes as follows the method of preparing what he has named ethereal oxygen, which he recommends in a large class of cases, such as pertussis, asthma and phthisis. He places in a Wolff's bottle with an inhaling mouthpiece attached to one neck, two ounces or more of ozonic ether, the ethereal solution of peroxide of hydrogen. To this he adds gradually solution of permanganate of potassium, eight grains to one ounce of water, by the other neck of the bottle, and then corks that neck. As the fluids come in contact, oxygen gas and ether vapor are given off freely, and can be inhaled by the mouthpiece. He regards this as a very valuable contribution to practical therapeutics.

Huamanripa—Is the name of a plant used by the natives of Peru in cases of bronchitis, catarrh and slight hemorrhages. Dr. Zapater used an infusion of one part of the leaves to forty of water, and found that in small doses it quickens the cardiac pulsations and augments the secretions, especially the saliva. Larger doses produced vomiting and sweating, and diminished the cardiac beats, the respiration and temperature. It is a good sudorific, and is said to exert an almost specific action in cases of pneumonia and pleurisy.

Pepsin.—Though it adds nothing to the system or body at large, of itself, pepsin (says Dr. F. M. Baker, in the *Eclectic Med. Jour.*) is a valuable agent in the treatment of diseases where the system suffers from indigestion, as in some cases of chronic gastritis, cholera infantum, dyspepsia, diarrhea, etc., in which there is great

emaciation, feebleness, etc., from the lack of proper blood to make tissue. It aids digestion, and fits the food for blood-making, thereby furnishing tissue. By continuing its administration for some weeks, with improved digestion from it, we obtain better blood, improved nutrition, increased strength, and an improved condition of the stomach.

It is frequently the case that diarrhea and the troublesome vomiting in cholera infantum and like diseases, are kept up by the continual presence of undigested food, which is constantly irritating the mucous membrane of the stomach and bowels. In such cases pepsin is a valuable remedy controlling the diarrhea and vomiting by aiding digestion, and preventing the presence of ingesta, thereby removing the offending cause. But it should be remembered that a continued use of it would impair the stomach by doing its work. The law is, use strengthens, disuse weakens. Indications for it are, sour stomach, pyrosis, vomiting, diarrhoea (feces containing undigested food), emaciation and feebleness, evidently from indigestion.

Polymnia Uvedalia.—This remedy is used with good results by the eclectics in that diseased condition of the spleen known as ague-cake. And, by relieving the engorged state of this organ, it regulates the portal circulation, and thereby corrects digestion, which we always find impaired when there is enlargement of the spleen. It is used with great success in chronic inflammation of the liver, and enlargements of this organ. It is used as an ointment over the affected part, and the tincture given in doses of five to ten drops every three or four hours. It is a valuable remedy in indigestion where there is engorgement of the intestinal glands, with tumid abdomen.

Resorcin.—Dr. George T. Jackson, of the New York Skin and Cancer Hospital, sums up his clinical experience with resorcin as follows: It is an irritating substance for eczema, though efficient in chronic cases where active stimulation is required. It exerts a powerful absorptive effect on new cell infiltrations. It is useful in epitheliomas, causing three cases to heal after four months' use. In one case the resorcin collodion preparation cured corns. A case of lupus erythematosus was cured after ten years' duration.

This drug is being recommended in pyelitis and other renal affections.

Dr. A. B. Bundy, in *Medical Register*, August 15, 1887, reports the successful use of a twenty per cent. ointment of resorcin in lanoline, in four aggravated cases of phlegmonous erysipelas arising from injuries to the hand.

California Laurel.—The California laurel exhales a peculiar odor, which induces severe frontal headache, followed by symptoms of spinal irritation. Mann and Hammond state that the preparations of this therapeutic agent have proved of great efficacy in nervous headache, cerebro-spinal meningitis, neuralgia, rheumatism, atonic diarrhea and bilious colic. Mann recites a case of cerebro-spinal meningitis which was cured by an embrocation of the fresh leaves bruised applied to the spine, while an infusion was administered internally. A fluid extract made from the fresh leaves with strong alcohol represents all the remedial virtues of the drug, and can be given in doses of ten to thirty drops, or applied externally. Of unrivalled value is the volatile oil in dental caries (inserted on cotton), and particularly in facial neuralgia (painted over the part).

Euphorbia Peplus.—Chewing small portions of this plant gave Dr. J. Compton Burnet (*Hom. World*, April 1, 1887) a sore throat, and he has subsequently cured several cases of angina—"just simple inflammation with swelling and painful deglutition"—with euphorbia peplus 3x, three drops in water ever four hours.

Capsicum.—This remedy, according to some authorities (*Med. Bulletin*, Nov., 1886), is invaluable in the treatment of atonic dyspepsia, and in the apepsia of chronic alcoholism. It is the most efficient agent that can be used to overcome the cravings for alcohol in dipsomania. It is also useful in the treatment of the opium habit. Incipient delirium tremens may be prevented, and a pronounced attack aborted, by the administration every hour of half-drachm doses of the tincture of capsicum, or from twenty to forty grains of the powder. Gastralgia, enteralgia, and flatulent colic may be readily relieved by a few five minim doses of the tincture. Capsicum is effective in the treatment of flatulent dyspepsia, hysterical flatulence, and the tympanites of typhoid fever. It is also valuable in the latter disease, and in typhus and other low forms of fever as a general nervous and cardiac stimulant. It is one of the most potent remedies that we possess for cholera morbus, cholera infantum, and Asiatic cholera. Diarrhea and dysentery, especially when due to the presence of fermentative material in the alimentary canal, may be quickly checked by large doses of capsicum. It will also be found of benefit in chronic malaria. It is more effective than any other remedy in the treatment of the asthenic types of scarlet fever, diphtheria, small pox, and other zymotic diseases. In phthisis, leucæmia, anæmia, and chlorosis, it stimulates the appetite,

promotes digestion, and increases the activity of the blood-producing organs. It is also valuable in the treatment of amenorrhea of thin, pale, or nervous subjects. In these cases the tincture should be given in five minim doses three times a day for a week before the time at which the menses are expected to appear.

Capsicum is invaluable in the treatment of functional impotence, and the impotence of nervous subjects. It is also of service in spermatorrhœa, prostaticorrhœa, leucorrhœa, and chronic cystitis. It is also serviceable in chronic constipation, and in the treatment of hemorrhoids when due to a relaxed condition of the rectal mucous membrane, a gargle composed of one drachm of the tincture of capsicum, two drachms of salt, and half a pint of water, will be found beneficial in chronic pharyngitis, and in hoarseness due to a relaxed condition of the vocal chords.

External applications of capsicum are valuable in the treatment of hysterical paralysis, lumbago, chronic rheumatism, torticollis, neuralgia and stomachic and intestinal colic. The tincture is an excellent application to indolent ulcers and unbroken chilblains.

Eucalyptus Honey.—In *Le Progrès Médical* (*Therap. Gaz.*) Dr. Thomas Caraman describes the discovery and the medical and chemical properties of a peculiar bee production to which is given the name of black honey. It is taken in enormous quantities from eucalyptus-trees in the wildernesses of Central Australasia, where they grow to a gigantic size. The insect which secretes this honey is said to be new to science, and has been given the name of *apis nigra mellifica*. A remarkable fact stated by Dr. Caraman is that the ordinary bee condemned to feed upon the flowers of the eucalyptus-tree rapidly dies off.

The so-called black honey is at ordinary temperatures a somewhat transparent, syrupy, thick, homogeneous, dark orange-colored liquid, with a peculiar odor similar to that of eucalyptus, is very soluble in water, and milk, and much less in alcohol. Its fermentation is exceedingly difficult, on account of the large quantity of levulose which it contains. Its specific gravity is 1.44, and it radiates the polarized ray at twenty-two degrees.

When Dr. Caraman, who affirms that he is somewhat fleshy, took four tablespoonfuls a day for a week, there was a marked lessening of shortness of breath on ascending steps, and slightly increased diuresis, with an augmentation of the urea.

Dr. Caraman believes that this honey will be a valuable remedy in the treatment of bronchial ca-

tarrhs, and that it acts as a sedative to the heart-beat, in a manner similar to digitalis. He thinks also that it will be of practical value as a febrifuge and as a bactericide. He hopes much from it in the destruction of the bacilli of phthisis and the pneumococcus of pulmonic inflammations, and even asserts that it has been employed in typhoid fever with success, and that in leucorrhœa it causes the affection rapidly to disappear, and kills the leptosis, vaginalis and the oxyures. He has also found it of great use in the treatment of gonorrhœa and diseases of the kidneys, bladder and urethra, and affirms that it acts more energetically than copaiba or sandal oil.

If this substance only does a portion of what is claimed for it, it will be a valuable addition to our therapeutic resources. We do not know of any of it as yet reaching this country. If it should grow in importance it is probable that artificial eucalyptus honey will be offered for sale, and it is, therefore, a matter of importance that not only the physical and medicinal properties of this drug be very carefully described, but that some test of purity be worked out.

Siegesbeckia Orientalis.—According to a correspondent of the *Medical Abstract*, this plant, which enjoys a high reputation in the mauritius for the cure of syphilis, scurvy and gout, is coming into quite extensive use in London for ringworm, scurvy, and thrush. The bruised leaves are also used as a poultice for sores and ulcers. In ringworm it is said to give very good results.

Myrtol.—This is a volatile oil obtained from myrtle leaves and possesses their characteristic odor. Its taste is pungent and slightly acid, succeeded by a feeling of coolness. It is said to be a splendid disinfectant and an energetic antiseptic, to stimulate the digestive functions without upsetting the stomach, and to increase the appetite. In moderate doses myrtol acts as sedative to the nervous system. It is eliminated by the respiratory and urinary passages. In order to obtain the best results in diseases of the respiratory passages, it should be employed with a view to combating subacute or chronic catarrhal affections, or it may be given at the termination of an acute attack of bronchitis when the fever has subsided. Another indication for its employment is an abundant opaque muco-purulent secretion. In these cases the secretion is diminished and rendered less purulent. The average daily dose given is ninety centigrammes in capsules, taken after meals in three doses of thirty centigrammes.

Hydrofluoric Acid for Phthisis.—M.

Garcin proposes to place phthisical patients in a small cabinet an hour a day which contains six cubic metres of air that is saturated with hydrofluoric acid. This saturation is obtained by pumping a current of air through a gutta-percha bottle that contains 100 grammes of the acid to 300 grammes of distilled water. The quantity of air pumped in is renewed every fifteen minutes, as the effect is quickly exhausted. The system has been tried for a year past in a number of cabinets that M. Garcin has had fitted up in a room in his own house, and during the month of August a hundred patients were submitted to the treatment. Of this number, fourteen remained as before, forty-one were improved, and thirty-five were cured, while ten died. It is stated that under the influence of this form of medication the attacks of coughing diminish and finally cease. The Koch bacilli cannot resist this acid, as they at first are found to diminish in number and soon they no longer segment; at last they entirely disappear from the secretions. The general state of all the patients was much improved, the appetite was increased, the night sweats ceased, and some patients treated over a year ago remain well. It seems that the workmen at the celebrated glass manufactory at Bascaret had first noticed that the hydrofluoric acid they employed had good effects on the health of consumptive persons.

Effects of Pure Terebene.—Dr. Harvey, of Birmingham, describes in the *Brit. Med. Journal*, January 29, 1887, the case of a man aged fifty-six, a chronic asthmatic, who took pure terebene (ten drops on sugar every four hours) with great advantage, for three days. At the end of this time the patient was seized with intense pain in the region of the left kidney, shooting into the pelvis and down the left thigh, with blood in the urine and severe strangury. Cessation of the terebene treatment resulted in speedy relief, and left little doubt that the condition was one of intense renal congestion caused by the terebene.

Iodide of Sodium.—Iodide of sodium is considered by Dr. Richardson (*Provincial Medical Journal*, March 1, 1887) as a valuable substitute for, or adjunct to, iodide of potassium. In chronic eczema and painful rheumatic affections it often answers well when iodide of potassium does not agree with the digestion. Combined with arsenic it is useful in lepra and psoriasis. Externally applied, in cases of indolent ulcer, chronic syphilitic sores, and offensive discharges from the nostrils, it acts as a good antiseptic. The following is given as a useful formula for the purpose:

sodium iodide, $\frac{3}{4}$ ss; tincture of myrrh, $\frac{3}{4}$ i; rectified spirit, $\frac{3}{4}$ ii distilled water, $\frac{3}{4}$ vi. To make a solution of eight ounces. Used in the form of fine spray from Seigle's steam spray-inhaler, Dr. Richardson found it of the greatest service in a case of syphilitic ulceration of the fauces.

Salol.—This substance is a white powder, insoluble in water, without taste, and of an aromatic odor, which may be made by substituting one atom of hydrogen of salicylic acid by the radical phenyl. The drug contains forty per cent. of phenol and sixty per cent. of salicylic acid. Several German observers have obtained decided benefit from its employment in acute and sub-acute articular rheumatism. Relapses and endocarditic complications were uninfluenced by it. A prompt action was produced in several cases of neuralgia in which salicin had proved inert, and also in *erythema nodosum* and *multiforme*, urticaria, and peliosis. In phthisis, it is recommended in doses of only 0.5 gramme ($\frac{7}{16}$ grs.). It is useful in all cases of diabetes. It is highly probable that it acts antiseptically in the intestinal canal, and it will therefore probably prove useful in intestinal catarrh, typhoid, and cholera. Syphilitic and other ulcers were rapidly healed by being painted several times a day with salol in powder. It was also found useful in ozena and otorrhoea, and a three per cent. solution formed an agreeable antiseptic mouth-wash.

Salol is recommended to be given in capsules, since it is insoluble in water, although soluble in alcohol. Seventy-five grains may be given in the commencement of a case of acute rheumatism, 15 grains being given every two hours; as soon as fever and pain are relieved the dose may be reduced as low as 30 grains a day, still, however, being given in doses of 15 grains.

Lappa Major.—Three cases of prolapsus uteri, which came under the notice of Dr. H. C. Allen (*Med. Advance*, Jan., 1887), for years had baffled every mechanical support, and confirmed invalids were the result. They were completely restored by lappa major in the lowest potencies. The characteristics appear to be an exceedingly sore bruised feeling in the uterus with great relaxation of the vaginal tissues; apparent lack of tonicity of the pelvic contents. These symptoms were all aggravated by standing, walking, a misstep or sudden jar.

Cubebs.—Cubebs consist of the dried berries of the *piper cubeba*, a climbing perennial plant which grows wild in Java. No systematic provings of this drug have been made by the New School. Besides such symptoms as "inflammation of the urethra," "secretion of mucus from the urethra

greatly increased," "hæmaturia," etc., which faintly indicate its great irritant action on the urinary organs, it gives a really important symptom, observed by Dr. Callell—namely, prostatitis; the gland feels enlarged to finger in rectum; perineum tender; last drops of urine passed with pain; after micturition sensation as if bladder still contained water. According to Dr. E. M. Hale, its sphere of action may be said to be primarily confined to the mucous surfaces, in which it causes vascular turgescence, inflammation, and a true catarrhal discharge; after which it seizes upon the deeper tissues, the muscular and nervous, and even the parenchyma of the kidneys. Cubebs is probably the most perfectly indicated remedy we possess for severe catarrhal inflammations of the *nasal*, *post-nasal* and *pharyngeal* surfaces, after the first or serous stage has passed. The discharge is thick, yellow green, bloody, and often offensive. It is universally recognized in lay and medical practice as an important remedy. No other agent gives as good results, unless it be eucalyptol, which seems to have a close similarity of action. Instead of the crude, Dr. Hale prescribes the first decimal trituration of the powder, or of the oleo-resin. The latter preparation dissolved sufficiently in water to make a lotion of enough strength a few drops to the ounce being sufficient. When the catarrhal disease invades the passages below, this remedy can be used in the form of a spray. In the treatment of bronchitis, with muco-purulent expectoration, it equals eucalyptus, copaiba, terebene and yerbasanta. Its action in this disease resembles that of stannum and antimony. In the catarrhal croup of children with profuse, tenacious secretions, and croupy cough, it may take rank with hepar and spongia. In large doses cubebs cause indigestion, flatulence, pyrosis, nausea, vomiting of mucus, etc. In small doses its beneficial action in gastric catarrh is undoubted. It is equally useful when the catarrhal affection extends to the bowels, resulting in discomfort and flatulence, slimy discharges, mixed with feces, and even piles, with rectal irritation and catarrh. In gonorrhoea it is difficult to differentiate between cubebs and copaiba. Both cause muco-purulent discharge; they both cause yellow, green, and bloody discharge, with intense urethritis (primarily), and atonic catarrhal discharge (secondarily). Dr. Hale's observations incline him to the opinion that the discharge of copaiba is more *irritating*, is *yellow*, *greener*, and *creamy*. That of cubebs may be *semi-transparent*, yellow or green, even blood streaked, and is *tenacious*. The *pain* is perhaps more severe with copaiba.

In recent cases they should be preceded by gelsium and cantharis. As regards dose, there seems to be no use in going above the first decimal dilution, and five to ten drops of the balsam or oleo-resin, will give better results when indicated. In acute cystitis, cubebs will do good service after aconite and cantharis have subdued the more inflammatory symptoms. It is indicated when the *vesical tenesmus* is prominent. In chronic cystitis it is of great service, though not so effectual as eucalyptus and chimaphilla. It seems to act better in the chronic cystitis of women, than in men. Trouseau has called attention to the usefulness of cubebs in irritability of the urethra in women. For this distressing affection it should be administered he says twice a day at meal times, in doses of from 30 to 60 grains, and continued in diminished quantities for several days after the cessation of the symptoms. Cubebs undoubtedly affect the nervous system in a decided manner. The particular condition which appears to have been beneficially modified by this medicine consists of "occasional vertigo, with nervous debility, and partial loss of muscular power, simulating the commencement of paralysis from central disorder of the brain, such as is frequently occasioned by excess in mental emotion, or intellectual labor, and is associated with dyspeptic derangements." From 8 to 15 grains a day are advised in this affection, taken at meal times. Probably much smaller doses taken on an empty stomach would have sufficed. Dr. Hale has cured very bad leucorrhœas by means of vaginal injections of aqua cubebæ, or suppositories of powdered cubebs. For cervical leucorrhœa, tampons saturated with the oleo-resin, diluted with glycerine, are equal to any other application it is said.

CLINIQUE.

NOTES ON THE DRY DRESSING OF WOUNDS.

By H. I. OSTROM, M. D., NEW YORK.

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WITHIN a few years very radical changes have been made in our methods of treating wounds. These changes are not the out-growth alone of a revision of our former understanding of the processes that enter into the repair of tissues. They do not rest alone upon the present more rational conception of the phenomena of inflammation, or depend upon an extended study of biology; they have followed necessarily from a

recognition of the fact, that the healing of wounds is regulated by the same laws which pertain to the general health of the system, and that a wound, if allowed, will heal without assistance.

The first attempt to treat wounds upon scientific principles, was made by Mr. Lister. Comparatively few surgeons now follow in all its bewildering detail, Mr. Lister's direction for antiseptic work; but his services to surgery have been beyond estimate, for he has taught men to think; and while the principles he advances, and the methods he lays down for putting these principles into practice antagonized some, they have forced every honest surgeon to examine his methods, and criticise his results.

The fundamental defect in antiseptic surgery as generally understood, lies in the postulate, that the tissues to be healed are full of septic organisms, and that these must be killed or rendered inert before repair can be accomplished in the simple manner provided by nature. That low forms of microscopic life are frequently the cause of inflammation that runs above a certain degree; that they are also the cause of suppuration, is no longer a question concerning which any doubt exists; but that the presence of such organisms is sufficient in all cases to bring about this phenomena, is beyond proof, indeed, many well known facts point clearly to their inability to do so unaided by a suitable environment, by an environment which, according to the laws of biology, furnishes pabulum of such a kind, and quantity, that the particular organisms are forced into proliferation. Of this environment, the earlier advocates of antiseptic surgery took but a passing notice, their attention was directed to the septic organisms, and these were killed, without much regard for the larger and higher organism which furnished a place for their development. While such a system of treatment will be successful in some cases, in others it must fail, from the fact that it does not recognize with sufficient emphasis the position of environment in the problem. The most perfect resistant of disease is health. Our system is constantly the host of low disease breeding germs. As long as the processes of waste and repair are maintained, and each tissue and organ is in functional equilibrium to every other tissue and organ, it is impossible for any disease germ to gain more food than is sufficient to support life. The condition is very different when the general health is reduced. Then, and then only, is it possible for low forms of life to act upon higher forms, to the extent of inducing disease. The more fully developed organism possess all that serves to distinguish the

less evolved forms, and is hence able to resist a tendency to atavism—always very strong—by virtue of the something more which it possesses in addition, and is also able to meet the attacks of lower organisms, and antidote their effects. This seems to be true of all forms of organic life. The germs of infectious and contagious diseases are active in proportion to the effete matter they find to live upon; and what more is this effete matter than the excess of waste over repair? An excess which represents an actual quantity of material whose nutritive qualities for high organisms have been exhausted, and is therefore especially adapted for the maintenance of the lower forms of life.

Life is a unit, the difference being principally one of degree between the parasite and its host. The germs of typhoid fever and the germs of septicæmia exist by virtue of similar laws, and neither can develop its specific disease unless the organism upon which it feeds has in some of its parts begun a process which furnishes pabulum for proliferation.

We now return, possibly with more clearness, to our former statement, that, unaided by environment, septic germs are powerless; from this statement we are able to deduce that by establishing health in the tissues, and excluding the sources of invasion, we remove the obstacles to healing, and allow the repair of tissues to proceed towards completion.

Upon this hypothesis is, I believe, based the surgery of to-day. The propositions involved in the antiseptic methods are true, but they belong to the cure of disease, not its prevention. The propositions involved in the aseptic methods are also true, but they are in the direction of the more advanced therapeutics, and are in harmony with preventive medicine. Aseptic surgery seeks to anticipate the effect of septic germs, while antiseptic surgery is directed more especially to their destruction.

But while preventive medicine is the medicine of the future, we can scarcely hope to attain such perfection in the art of living as to render the treatment of disease unnecessary. So, also, in surgery, and the treatment of wounds, some cases can only be successfully treated by antiseptic methods, while others yield better results from the use of aseptic methods.

We have then two great systems for the treatment of wounds, the proper selection of which will not only mark the skillful surgeon, but will have a most important influence upon the future course of the case treated.

Whether we shall use moist or dry dressing for

wounds, relates with equal importance to their antiseptic or aseptic treatment, for the effect of moisture upon septic organism is always the same, it favors their growth and development; the effect of moisture upon tissues is also uniform, it softens them, favors congestion by relaxing the capillary walls, and brings about destruction of the white blood corpuscles by reason of their power to absorb water. In a lesser degree moist dressings have an effect upon the tissues similar to that of a simple cataplasm; and we almost invariably find upon removing a moist dressing that the tissues present an appearance very similar to that observed after the use of a poultice. Why, therefore, should we, when seeking to prevent the action of septic germs, use a means that directly favors, not only their proliferation, but also induces tissue changes which are far from favorable to health, if they do not directly furnish the pabulum which septic organisms require? The use of water in surgery is chiefly for cleansing and irrigating, to remove foreign bodies and cleanse the wound. Alone, or as a vehicle for drugs, the specific effect of which it is desired to exhibit in the dressing of wounds, its use cannot but interfere with the end sought, and it is a fact that the most perfect reparative results are obtained when wounds have been deprived of all moisture by dry sponging. The ideal healing is hermetical; this cannot be obtained in warm blooded animals by moist dressings, but given a wound made clean by the use of perfectly pure water, rendered either antiseptic by the use of some agent, or aseptic by boiling, the most perfect results will be obtained by a dry dressing which, while assisting in sealing the cut surfaces, prevents the entrance of atmospheric germs. The case is not materially altered if the wound suppurates, save that here, if possible, the entrance of water is even more injurious, for it directly favors suppuration.

The dry dressing, or absorbent pad, meets every indication for treatment. To those surgeons unaccustomed to the use of dry dressings the objection is frequently urged that the moist dressing is much more soothing. My experience is opposed to such an effect. Both in my hospital practice and in private practice I have, for several years, used some form of dry dressing on all my operative cases, and I cannot recall an instance in which pain could be referred to the absence of moisture from the dressing. In some cases marked relief has followed the change from moist to a dry dressing. At the Ward's Island Charity Hospital I have had ample opportunities to test the relative value of these two methods of treating wounds. Some of the worst cases that

come under the surgeon's care are sent there, and few operations are undertaken that promise much success. I have, however, found that dry dressings yield the best results. Especially in warm weather do I find this true. The dry dressing can be allowed to remain on longer than any moist dressing—a matter of the first importance in the healing of wounds—and is attended with much less suppuration. The wound also heals more quickly, and with less constitutional disturbance.

Foremost among the materials for the dry dressing of wounds I would place iodoform. I know of no drug of such general usefulness. Boracic acid, sub-nitrate of bismuth, oxide of zinc, and iodol, are very useful, and fill individual indications, but none of them possess that wide applicability that I have learned belongs to iodoform. I do not wish to be understood to say that iodoform should be used as a dressing for every wound; it has its place, in common with every other drug, but my experience has taught me that this place is a very large one. The poisoning from iodoform I am inclined to regard, as in many instances, more fanciful than real, for though I am in the habit of using the drug freely, and in cases where absorption may be looked for, I have yet to meet my first case of what I can call iodoform poisoning.

Recently I have been well pleased with the dry oxide of zinc as a dressing where stimulation is called for. Its antiseptic properties are not marked, but it seems to have a specific action upon the granulations of large surfaces, and to favor the development of fibroblasts. I am at present, in my wards at the Ward's Island Hospital, carrying out a series of experiments to test the position of the oxide of zinc as a dry surgical dressing.

The sub-nitrate of bismuth I do not use much; this may be because I have not learned its place. It seems to destroy the vitality of epithelial cells, for I have noticed the superficial layers become hardened under its use, this hardening having apparently little tendency to desquamate.

My rule in all operations, is to observe the strictest cleanliness, to exclude by personal attention, or explicit directions, every possible source of contagion, or infection, from the wound; in a word, to render the entire operation aseptic. My assistants and nurses are instructed in the value of nicety of work, and gentleness of manipulation, and cautioned against all unnecessary handling of the parts.

My rule for the dressing of wounds—I usually apply at least the first dressing myself—is

to render the part dry, and apply a light and elastic compress, with one of the powders that I have mentioned dusted on it. In general hospital practice, expense will prevent the use of an elastic dressing, but in private practice I use a compress of finely picked prepared wool, over which I place a layer of absorbent cotton sufficiently thick to take up any discharge that may come from the wound. Compression is always maintained by a well adjusted bandage. This dressing is not removed until necessary; the necessity existing in the character and quantity of the discharge, and the general condition of the patient. A well adjusted dressing is frequently disturbed for the idle purpose of examining the wound. Such interference is not justifiable. The surgeon should be able to tell how the wound is progressing without exposing it. When a drainage tube is used, I usually let it drain into a separate dressing, that can be removed without disturbing the wound, for it will be remembered that drainage of simple operative wounds is not required longer than forty-eight hours. Then the serum will have ceased to exude from the cut surfaces, and the true reparative processes will begin. Judgment in attending to this part of the treatment of wounds, will greatly hasten their healing. But here, as in every other department of surgery, no iron rule can be laid down. Every drainage tube cannot be removed in forty-eight hours, some must remain in position until the wound has almost healed. Only by attention to the smallest details of operative surgery, is it possible to attain the perfect results which we have reason to expect.

CLINICAL NOTES ON BERGEON'S TREATMENT.

By FLORA A. BREWSTER, M. D., Baltimore, Md.

ANYTHING new in regard to the treatment of phthisis, especially when presented to the medical profession by such authority as Professor Cornil and Dr. Morel, of Paris, could scarcely fail to arrest the attention of the thoughtful physician.

The French Academy listened to Dr. Morel's treatise on Bergeon's method with respectful attention. Our own physicians have used it quite extensively the past year, and the clinical reports in most cases have been favorable.

The gravest symptoms of phthisis, it is claimed, are due to septicæmia. This is caused by suppuration of the tubercle, which, brought in contact with the air, undergoes putrefaction and is absorbed into the system. The bacillus, then, produces lesions of texture which become fatal to the organism by rapidly destroying it, or by caus-

ing softening and by absorption produce septicaemia.

The treatment, then, must be antiseptic. The chief antiseptics used have been bisulphide of carbon and sulphuret of hydrogen.

In my own practice I use the first of these with great caution and have no unfavorable results to report. But we must not forget that bisulphide of carbon is a *powerful solvent*, and that if used often it may do the tissues serious injury. I believe it ought never to be used as an antiseptic when softening of the tubercle has extensively taken place.

I use it when the cough is hard and dry with scanty expectoration, but even then with great caution.

Eucalyptus has given me better results in controlling the fever, night sweats and cough than either bisulphide of carbon or the sulphur waters.

I also use the eucalyptus locally in the form of a spray to the throat (Semple's inhaler) if there is laryngitis. The following are notes of three selected cases:

CASE A.—Mrs. C., age 36 years, came to me May 25, 1887, for amenorrhœa; had been under treatment about a year for bronchitis; voice, high pitched and husky; violent cough, hard and dry; temperature in the morning normal, but 102° to 103° in the afternoon; abdomen distended, hot, dry and tympanitic; almost complete anorexia with vomiting. Diagnosis, laryngeal pulmonary and peritoneal tuberculosis. Under treatment the appetite improved, the vomiting ceased, and the tympanites disappeared, while the cough was less distressing, but the fever increased to 105° and the strength failed rapidly. Night sweats also appeared. About the 1st of August commenced Bergeon's treatment, and the temperature began to fall at once. At the end of the first week the temperature had fallen to 100° F., and in two weeks was normal. The appetite improved, patient slept well, and coughed only to expectorate.

October 11.—Patient died suddenly after eating her supper with unusual relish.

In this case the home surroundings were unfavorable, since the husband was at home, insane, and under little or no restraint. This is the only fatal case I have had under the new treatment.

CASE B.—Miss E.; diagnosis, cellulitis with pelvic abscess; has anorexia, vomiting after eating, pelvic pains, headache, backache, night sweats, etc. All these symptoms improved after the abscess had emptied itself through the vagina, but none of them had entirely disappeared.

March 1, 1887.—Commenced Bergeon's treatment with sulphuret of hydrogen twice daily.

March 8.—Patient has a crop of boils covering the entire back; the vomiting has ceased; no headache nor backache.

November 15, 1887.—Patient has gained in flesh and strength; has had no return of vomiting after eating; still uses the treatment occasionally.

CASE C.—October 9, 1887.—Mamie S., age 3½ years; child lying with head thrown back and mouth open gasping for breath; sharp, croupy cough every few minutes; face pallid, earthy, sallow; temperature 102°, pulse 130, respiration 30, sharp and whistling; tonsils enlarged and covered with the diphtheritic membrane; urine scanty and high colored; thirst, restlessness and delirium. The child had been ill three days and the attending physician had given an unfavorable prognosis.

3 p. m.—Administered Bergeon's treatment with carbon bisulphide and removed the false membrane; child somewhat relieved.

10 p. m.—Bergeon's treatment with eucalyptus and removed the false membrane.

11 p. m.—Child has closed her mouth and breathes through the nostrils; face flushed, sleeping quietly.

October 10, 8 o'clock a. m.—Slept well during the night; fauces covered with the membrane; temperature 101½°; respiration easier; Bergeon's treatment with carbon bisulphide; removed the false membrane.

9 p. m.—Temperature 101°; Bergeon's treatment with eucalyptus.

October 11, 9 a. m.—Temperature 99°; child much better; removed the false membrane and gave Bergeon's treatment with eucalyptus, which I continued to administer twice daily during the week. The temperature became normal the third day, and at the end of the week the child was convalescent. I must confess that I gave the child the remedies which were indicated throughout with stimulants, but I cannot doubt that Bergeon's treatment relieved the grave and dangerous symptoms.

From a careful review of all the clinical reports that I have seen, and from the results in my own practice, I am persuaded that we have in Bergeon's method a valuable means of applying antiseptic remedies locally to the alimentary and respiratory tracts.

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The rallying motto of a Sectarian name is incapable of exciting to sober, calm, scientific investigation; it only rouses the explosive spirit of accusations of heresy to a fierce, volcanic flame.—HAHNEMANN.

NEW YORK, DECEMBER, 1887.

IMAGINARY THERAPEUTICS.

IN THESE DAYS of high dilutions, Christian science and hypnotic suggestion used in the treatment of disease it is of service and to the point for scientific investigation to show from statistics the natural course of diseases when left to themselves. Dr. F. J. Young* has done excellent service in this direction, and his results show with what scepticism the profession ought to view the reports of results claimed as clinical experience. Dr. Young says:

"On the 10th of January, 1887, I purchased a pound of sugar of milk and a quantity of pure sugar globules, with which I have since been vigorously combating diseases in a way very analogous to the modes of the most advanced homœopaths of the present time.

"My first case was one of double pneumonia in a lady 65 years old, one lung becoming involved as the other cleared up. At about the fourth or fifth day, the patient being delirious, with a temperature of 103° and a pulse of 110°, counsel was asked for, which resulted in a call for the family physician from New Haven to meet me in the case, whom I found to my surprise to be an enthusiastic homœopathist. He recommended arsenicum 30th and

bryonia 30th so strongly, and with such apparent confidence, that I consented to give them a trial, which I immediately put into execution by sending her two packages of my pure milk sugar, to be dissolved in separate glasses of water; the patient to have a spoonful from each alternately every hour. The friends of the patient claim that there was a very marked improvement in the case at once. At any rate convalescence followed as soon, and was as complete, as I have ever seen it in any similar case under the most energetic scientific treatment.

"Following this case I have treated, entirely on the expectant plan, during the two months between January 10th and March 10th, 1887, 119 different patients with the most diverse acute complaints, the results of which I present in tabulated form, which shows the duration of these diseases, under simple, fair nursing, and entirely unfluenced by medicine. There was of acute pharyngitis 15 cases treated with wet towel applied to the neck—but no medicines or gargle; four terminated in recovery in four days, seven in three days, two in two days, one in five days and one in one day."

Then follows a list of thirty or more different diseases, including quinsy, pleurisy, dysentery, erysipelas, etc., all treated by the same method, and Dr. Young concludes his paper by saying:

"I have followed out the Placebo treatment in about one-sixth of the cases which have fallen under my care during the two months of time covered by these statistics. I have abandoned it when once commenced in about twenty cases, where I thought that the patient was not doing as well without medicine as he ought to do with it."

As a sample of what hypnotic suggestion will do, Voisin, in speaking before the Société Méd.-Psychol. De Paris on the treatment of amenorrhœa by this method, reported the following miraculous case: "A woman, aged 28, had suffered for ten years from neuralgic pains and dysmenorrhœa. The menses had ceased to appear since three months, and various symptoms of hysteria, such as sensations of a globus, uncalled-for crying, insomnia, etc., had shown themselves. The treatment was futile. The patient was hypnotized by Voisin, and told that her menses would appear four days later. The prediction came true at the stated time. The physician could in this case cause the menses to appear and even to disappear at will. He reported some other similar cases, and terminated by asserting that through a hypnotic suggestion we are enabled to provoke hemorrhages from the nose and skin, to

* Vide N. E. Med. Monthly, July 15th, 1887.

cause the appearance of vesicles, and to check an indomitable diarrhœa."

In view of such facts, together with the reports of so-called drug provings as furnished by Dr. C. Wesselhœft from time to time, in which the sugar of milk administered for some days before the drug, produced *symptoms* which could not be distinguished from those of the drug itself, physicians ought to be most careful in reporting their "provings" and their clinical experience, in order that the fictitious may not be increased or perpetuated, for there is already enough *fact* in medicine to occupy our whole time, to say nothing of the demands of truth and veracity.

The true scientific spirit, according to Dr. T. Wharton Jones, is to let those who think they know, without ever having looked to see, review their supposed knowledge and cast their thoughts over again; and if, in the particulars, they find they have mistaken words and fancies for realities, and accepted the dicta of pretenders instead of the evidence of observed facts, let them correct the record and acknowledge the truth as it is in nature. Moreover, let them remember that he who propagates a delusion, and he who connives at one when already existing, both alike tamper with the truth, and that we must neither lead nor leave men to mistake falsehood for truth. Not to undeceive is to deceive.

DIPHTHERIA.

DR. CARL BUNSEN, of Wisconsin, a brother if we mistake not of the celebrated jurist, Chevalier Bunsen, has in a recent article in the *Scientific American* discussed the cause, origin and propagation of diphtheria in an original, and to say the least an exceedingly interesting manner. His researches carried on through the microscope, inoculation, and vivisection was very minute and conducted with the utmost care, and the conclusions reached, are what seems to him the deductions from the revelations of the microscope on living tissues under the influence of diphtheritic poison.

If an invasion of common, ordinary catarrh cells has begun, we find that the mucous membrane becomes covered in a few hours with millions of

minute, round, globular bodies, which are fastened to the underlying epithelial cells by two minute, hook-like appendages or rootlets, being covered at the same time with mucus, which protects the cells against the influence of saliva. When we examine these little, round bodies on a *living* subject, we see that the inside of these cells contains a clear blastema. After a while, we see that upon the surface of these cells there appears a nucleus, and, just before bursting we discover from three to five nucleoli.

These little cells will, during their growth and propagation, absorb the nitrogen and water at the expense of the mucus, which, in consequence of this process of fermentation, will be soon transformed, and can then no longer protect the little fermenting bodies against the ptyalin of the saliva, which soon puts a stop to their life, and the catarrh ceases, and the invaded parts become normal again. In those places which the saliva is not able to penetrate, the process of fermentation ceases on account of exhaustion, and the little cells will die.

Entirely different in its action is a cell of a catarrh which has its origin in the disease we call gonorrhea, the so-called syphilitic or gonorrhœic catarrh. In the first stage of life we cannot microscopically discover a marked difference between the common catarrh cell and that of a gonorrhœic origin. Their outer form is the same. Both kinds of cells are round, globular bodies, which are fastened between the rims and the walls of the underlying epithelial cells by two little hook-like appendages, which adhere so firmly in their places that they usually remain in their fastening places, and tear from the cell body if we try to remove these cells for the purpose of examination and propagation. When we look at these transparent bodies uninterruptedly (that is, during the life of the subject upon which they grow and propagate), we shall soon detect that the nucleus of these latter cells is suspended and surrounded by the blastema, and that just before bursting, double nucleoli can be seen, usually three to five appearing in one nucleus. As soon as the outer integument is rent, we notice that the blastema is forming a protecting cover over the nucleus, which resists the influence of the ptyalin of the saliva,

which latter ferment does not produce any change in such kind of blastema. If we make our examinations with a powerful microscope, and during the lifetime of the animal, where a constant and fresh supply of lymph and blood is circulating for the support of the epithelial cells, we shall soon discover that the double nucleoli begin to lengthen at one end and to penetrate through the nucleus and blastema. Being fed on the liquid remains of the mother cell, it simply follows that the lengthened nucleoli are of the same nature.

If we can keep the animal that we use for purposes of experiment alive for a few hours, and we follow the growth of this medusa (for I am inclined to call it by this name), we shall soon see that these filaments are lengthening rapidly with a jerking motion. In the course of about three hours, we shall see that these filaments stop growing, and that they grow larger around, and soon we may notice that minute light gray dots appear inside of the now transparent integument, which continue to grow larger and larger until the integument bursts. With my micrometer I have calculated that there are sometimes from two hundred to three hundred little dots in one integument. After the integument has fallen to pieces, the little microbes will pierce the little hooklets in the wall of the epithelial cells and begin life on their own responsibility. Having been originated and fed on a poisonous mother germ, we can easily comprehend why such a catarrh will never stop; and having transformed the mucus into a thin corroding fluid that is unable to protect the underlying epithelial cells, the parasites will then attack and destroy the epithelium.

Each of these microbes will soon follow the same process of propagation, and we must not wonder that, in a couple of days, millions of these filaments are crossing and recrossing the whole mucous surface of the larynx, fauces, and nares. But these are not the only parts that will be infected. They will reach down into the pharynx and esophagus: but it seems that below the epiglottis they do not prosper, as these filaments do not grow much and their propagation is much retarded and disturbed. Their *nidus* ceases below the epiglottis. The reader may wonder why I have been so very particular in describing the

cause and progress of this latter catarrh. I shall simply state here that diphtheria and this gonorrhoeic catarrh are closely connected, that diphtheria is *only the second state* of this catarrh, as I *am well able to prove* through my experiments on live rats.

Dr. Bunsen proceeds to show by his experiments upon rats in which he observes the formation of cells and the development of microbes in the living tissues through microscopic lenses, magnifying from three to four thousand diameters, that in diphtheria and gonorrhoeal catarrh in its second stage the cell growth and the development of microbes are precisely alike and the results the same. He compares numerous cases of gonorrhoeal pharyngitis and ophthalmia, and gonorrhoeal rheumatism with diphtheritic conditions, and finds them to closely resemble each other in progress and results. Among the lumber camps of Northern Wisconsin the writer thought he could trace the origin of epidemics of diphtheria, so violent as in five camps to break them up entirely, to one or two men who had come into the camps with a gonorrhoea. From the inmates of two camps shortly after they reached their homes, their families came down with diphtheria. The men had slept in the rooms with the persons infected with gonorrhoea and a severe catarrh, and had breathed the same atmosphere, used the same towels, and doubtless carried the germs of the deadly foe, diphtheria, to their families. To say the least, the researches of Dr. Bunsen show minute and intelligent study, and are worthy of careful consideration.

SACCHARINE URINE.

SUGAR in the urine does not necessarily point to the approach of a fatal diabetes but may be temporary and simply the result of physiological changes, but a high or even moderately high specific gravity and the presence of sugar for any length of time is always sufficient to lead to a close scrutiny of general conditions and the adoption of practical measures as to diet and general habits of life. Physicians are often misled in their diagnosis by placing too much dependence upon tests which are not in every case to be trusted. We all know that an excess of urates

will reduce the cupric to the cupric oxide in Fehling's and Trommer's tests the same as sugar, and the same results will be obtained by a variety of medicinal substances when taken into the system such as chloral-hydrate, chloroform, turpentine, benzoic and salicylic acid. It is of the utmost importance to the diagnosis, then, that some accurate test, which will disclose even a minute amount of sugar in the urine shall be used in urinary analysis. Such a test Professor R. Ultzman thinks is found in phenyl-hydrazin-chloride which is as delicate as the Fehling test, and will give the characteristic reaction with no other substance found in the urine but sugar. Dr. Bond says in the *Medical News* in making the test, pour the phenyl salt—which is a dry substance resembling bran—into an empty test tube until it is filled to the distance of about four-tenths of an inch from the bottom, and crystals of sodium acetate, ground fine to an equal weight. Upon this pour the urine, clear or cloudy, until the tube is half full. Shake the tube until the crystals of sodium are dissolved, then heat gently over a low flame until the mixture has boiled about half a minute, cover the tube and let it stand for fifteen minutes when if one-fifteenth of one per cent is present the crystals can easily be seen with a magnifying power of 200 diameter, first as bright yellow needles, which branch out or are joined by others as they are formed until the field is dotted with groups like delicate sprays or sheaves. When the amount of sugar is extremely small it is necessary to let the urine stand as much as forty-eight hours after boiling. An accurate diagnosis of this trouble which is so apt to prove fatal when it has obtained a firm foothold is of course of the utmost importance, but unfortunately so little is known of its pathology that our treatment often produces only temporary, if any, benefit. The fact that irritation of the floor of the fourth ventricle of the brain is followed by sugar in the urine is by no means a proof that this is the only cause or that some other conditions may not produce like results, but a correct diagnosis is a long step towards practical results in treatment.

—Bignon, by experiments on dogs, finds that hypodermic injections of cocaine kept up until the poison is eliminated prevents fatal results.

PUBLIC AND PRIVATE CHARITIES.

ALL THE great and small charities of every community which are not sufficiently fortunate to receive their support directly from the public purse or from private endowment will be active during the coming months in securing funds to carry on their work through the year. The comparison between public and private institutions in the economy and excellence of their work is so clearly made and so strongly put in the editorial comments of a recent issue of the *New York Daily Times* upon a speech of Mayor Hewitt, that we make liberal extracts, and strongly urge their careful consideration:

Mayor Hewitt, at a recent meeting in behalf of the Manhattan Hospital, made some very sensible remarks in regard to public and private charities. He stated, what experience shows to be true, that no large city had ever undertaken to provide for such a multitude of sick poor and insane as New York has done without calling in the aid of private charities. He considered the true policy to be to encourage private beneficence and supplement such efforts with appropriations from the public treasury. He believed that the best management was secured by placing such charities under the guidance of leading citizens, who should serve without salary. These wise suggestions are certainly confirmed by the experience of many large cities, and especially of London, where probably among all great cities the most extreme social evils are to be found. A very large portion of the charities of that metropolis are carried on by private associations, aided by public benefactions, and notoriously the least efficient of the beneficent efforts of London are those which are under the sole management of public officials. Private management is found to give the enthusiasm and personal and individual supervision and sympathy which above all make such efforts successful. The most distinguished citizens are willing to serve as trustees if they are permitted to have the influence in those matters which should belong to them. The public methods of dispensing aid run into formal modes and hard and dry channels. They have little of human sympathy, and they are not found in the long run as economical as are well-organized private associations.

In New York, as is well known, our public charities for the sick could never for a moment compare in efficiency with such private hospitals as the St. Luke's, the Roosevelt, Presbyterian, the Women's Hospital, and others. The care of the insane on Blackwell's Island has been notoriously behind the age as compared with that of private asylums, and the whole charge of children in the Randall's Island Nursery had finally to be transferred by law from the public officials to semi-private homes and asylums which were partly supported by public appropriations. No public ministrations to children have ever approached in efficiency and economy such private efforts as those of the Children's Aid Society, the Home of the Friendless, the

Wilson Mission, and others. The distribution of public alms, such as coal and other assistance, has been frequently corrupt and misdirected compared with such private distribution as has been carried on by the Poor Association, St. John's Guild, the Charity Organization Society, and other private agencies. The private charities of our city show an enthusiasm and a sympathy for the objects of their benevolence which could never be manifested by public agencies. They are compelled to the greatest economy by moderate incomes which come directly from subscribers, and their trustees, being men of high character and position, guide their movements with a discretion and wisdom rarely shown among the officials appointed by the Mayor or Governor. The private benefactions of the city would, however, lack in solidity and permanency if they did not receive occasional grants from the public treasury. As Mayor Hewett has said, it is the combination of public and private elements which makes them so useful.

The policy of the future in poor administration in New York should evidently be to send out from the public institutions as many as possible to be cared for by private agencies or in State asylums. The highest efficiency would be obtained by a judicious mingling of public and private efforts in the care of the helpless classes.

THE POISONED CHALICE.

DR. M. O. TERRY, in the *Physician's and Surgeon's Investigator*, makes the following remarks in regard to the mode of administering the wine at the communion table: "At the communion table the church calls for the saint as well as the sinner (of the past), and each bows and partakes of the same cup and for the same purpose. The pure in mind and body sips from the cup which has just left the lips of one physically impure. In one is an incurable disease. The whole system is a wreck! The pure and healthy child takes the cup from the unfortunate child of heredity, the offspring of physical impurity. Shall I say what diseases may be communicated in this manner? There are many, and any one of them has yet to be treated successfully or to be thoroughly understood by the medical men of this generation. Now I say to the church, is it just to humanity to administer a rite which is given as a symbol for purification, in such a manner that the process of giving it endangers or contaminates the innocent child as well as the aged parent? It is said that cleanliness is next to Godliness. If this be true, ought not the church to revise her methods in this particular?" The Roman Catholic Church has long ago answered Dr. Terry's question. In that church the cup is never presented to the communicant, but only the wafer, and yet in no church organization in the world is the Lord's Supper looked upon as so sacred or has so deep a significance. For reasons such as Dr. Terry has presented, as well as others, the cup is only partaken of by the priest, and it certainly would detract nothing from the

sacrament if this practice would be followed by the whole Christian church in all its organizations.

HAHNEMANN AND HIS WORK.

HAHNEMANN was no hero worshipper himself, and we should judge from his writings that he would not justify the blind adherence to his theories and to sectarian names which are promulgated in some quarters.

On the occasion of the commemoration of the one hundred and thirty-second anniversary of Hahnemann's birth, Dr. Mahendra La 'l Sirca'r, the accomplished Editor of the *Calcutta Journal of Medicine*, delivered an address in Calcutta upon "Hahnemann And His Work."*

We wish it were possible for every medical man in the land of whatever shade of opinion, to read this able and interesting paper. We make the following quotations from the paper with our commendation:

As a general rule we do not scrutinize the present as we ought and can, and even the partial and fragmentary knowledge that we cannot help acquiring we do not apply to understand the past. The consequence is, that the records of the past, necessarily fragmentary and sometimes designedly partial and one-sided, pass uncriticized or only partially so. And hence men and events acquire a magnitude and an importance which they do not intrinsically possess. From the point of view of truth this is not as it should be, even if it had not exercised any evil influence on the progress of mankind. But we know and feel how enormous is the evil compared with the infinitesimal good that such a state of things has brought about.

Though truly the father of modern science, what an obstructive influence on the progress of knowledge in general had Aristotle exercised for centuries! Though for his time a most accomplished and philosophical physician, what baneful influence on the progress of the healing art has been exercised by Galen! And has not, till recently, the name of the great Newton himself stood in the way of the acceptance of the undulatory theory of light?

Thus, gentlemen, you see there is, strangely and paradoxically enough, danger to the world from its own great men. The danger is not unoften of the most lamentable, because of the most inhuman and brutal character, and it is always of an obstructive character as regards progress. This danger is fostered and aggravated by the general tendency to give prominence to the good qualities of great men, and pass over their faults. This is the sort of danger I apprehend from our exaggerated estimate of the great man in honor of whose birth-day we have met here this evening.

* See *Calcutta Journal of Medicine*, for May, 1887.

This is the reason why I did not join in former similar demonstrations. And this is the reason why it was not without considerable hesitation and reluctance that I have agreed to take part in this day's proceedings.

That my apprehensions are not unfounded, that they are not the imaginary fears of an over-sensitive and hypercritical mind, will be admitted by all who have a moderate acquaintance with the literature of our subject. Have not some of the extreme followers of Hahnemann looked upon him as the Messiah of Medicine, his *Organon* and other later writings as the gospel of the Healing Art? Is it not deemed heresy to deviate even by a hair-breadth from his teachings? Under these circumstances it is not easy for one who really believes that his is the greatest name in medicine, that his discoveries far outshine any other discoveries in importance and beneficent influence upon the progress of the healing art, and therethrough upon the destiny of the human race, it is not easy I say, under these circumstances for such an one to maintain equilibrium of mind when considering his character and achievements, especially on occasions such as this when people meet from a sense of duty and gratitude to do honor to his memory. But great as may be the great men of the world, greater by far is truth. Indeed, in my humble opinion, the greatness of great men should be judged not by the amount of work they have done, but by the amount of truth they have worked out. And against this should be set off the amount of error which mankind have inherited from them.

It should be noticed that notwithstanding all the persecution he did not yet return abuse for abuse, but that in "*A View of Professional Liberality at the Commencement of the Nineteenth Century*," written in 1801, he entreats his colleagues to be brothers, to be fair, to be just. "We all," says he, "strive after a common, holy object; but it is not easy to be attained. It is only by joining hand in hand, only by a brotherly union of our powers, only by a mutual intercommunication and a common dispassionate development of all our knowledge, views, inventions and observations, that this high aim can be attained: *the perfecting of the medical art.*"

But persecution had the effect on him which it has on all great and noble minds endowed with indomitable perseverance and an undying love of truth. It roused his intellectual energies to greater activity in the merciless exposure and destruction of error, and the gradual unfolding of truth in medicine. In his masterly little work, significantly entitled, *Æsculapius in the Balance*, published in 1805, he showed that Old Speculative Medicine, though hoary with age, was when weighed in the balance of fact found to be wanting in the essential function which alone could justify its existence, namely, therapeutic success, and that this was due to its want of a guide law for the discovery of health-instruments and of their mode of administration. Having thus accomplished the complete demolition of Old Medicine, he indicated the materials out of which the superstructure

of the New, the true, rational Medicine is to be raised, in his work published in Latin, which he very properly called *Fragmenta de viribus Medicamentorum positivis*; and sketched out the plan of the edifice in his *Medicine of Experience*.

From 1805, when all the above works were published, to 1810 he must have had ample evidence of the truth of the law of cure he had discovered. For it was in this year, the last of his residence at Torgau, that he published the first edition of his *Organon*, under the ambitious title of the "*Organon of the Rational Healing Art*," after the examples of Aristotle and Bacon. It is in this work that he used for the first time the word *homœopathy* with which he christened his doctrine. In this work he enunciates the fundamental principles of his doctrine, not with the hesitation and reserve of a man who was still groping in the dark, as he did in his *Essay on a New Principle*, and even in his later *Essay on the Medicine of Experience*, but with the boldness and confidence of one who was convinced of their truth by repeated verification. The principles enunciated were:—

1. Never to give any substance as medicine of which the pure action in health has not been ascertained.
2. Always to give but one medicine at a time, and never to repeat even that until the action of the first dose has been exhausted.
3. Always to select a remedy homœopathic to the disease, that is, one which is capable of producing a similar morbid state, or similar symptoms, to the disease.
4. To give it in such a minute dose that it shall only act on the part morbidly susceptible of its action, raised to a condition of idiosyncrasy by the disease whose likeness is represented by the pathogenetic effects of the drug. * * *

But these lectures had not the desired effect on the profession at large. For, and this was a most unfortunate circumstance for the spread of homœopathy, with the ascendancy of his fame and fortune declined those qualities of mind which had characterized him in his earlier years—modesty and toleration. We have the evidence of one of his pupils who attended these lectures that "his tone became more dogmatic, and that his manner was not calculated to gain for himself and his doctrines many friends and adherents; for, whenever it was in his power, he poured forth a flood of invective and abuse against the old system of medicine and its advocates, so that the number of his hearers hourly diminished, till at length only a few of his pupils attended."

I do not for a moment wish you to imitate him in all that he said and did. My prefatory words must have told you that this is far from my wish. Indeed, gentlemen, I believe that if with the vigor and sagacity of his mighty genius, Hahnemann had retained the sobriety and modesty of the philosophy that he so eminently displayed in his early years, much of the acrimony and prejudice and opposition of the profession directed against him and his system would

have ceased to be. His example ought to stand as a lesson and a warning to future discoverers as to how they promulgate their discoveries. Great is truth, indeed, and will prevail; but we must not forget that truth has to be presented to mortal men, with passions and prejudices and weaknesses inherent in their very organization; and we must not also forget that no one has the monopoly of all truth.

THE CREDULITY OF SCIENTIFIC MEN.

A HIGHLY instructive case in which "a ridiculous error and a ridiculous credulity were the direct results of theoretical preconceptions," is related as follows by the Duke of Argyll in a recent number of the *Nineteenth Century*:

"Along with the earlier specimens of deep-sea deposits sent home by naturalists during the first soundings in connection with the Atlantic telegraph cable, there was very often a sort of enveloping slimy mucus in the containing bottles which arrested the attention and excited the curiosity of the specialists to whom they were consigned. It was structureless to all microscopic examination. But so is all the protoplasmic matter of which the lowest animals are formed. Could it be a widely diffused medium of this protoplasmic material, not yet specialized or individualized into organic forms, nor itself yet in a condition to build up inorganic skeletons for a habitation? here was a grand idea. It would be well to find missing links; but it would be better to find the primordial pabulum out of which all living things had come. The ultra-Darwinian enthusiasts were enchanted. Hæckel clapped his hands and shouted out 'Eureka!' loudly. Even the cautious and discriminating mind of Professor Huxley was caught by this new and grand generalization of the 'physical basis of life.' It was announced by him to the British Association in 1858. Dr. Will. Carpenter took up the chorus. He spoke of 'a living expanse of protoplasmic substance,' penetrating the whole mass of the oceanic mud. A fine new Greek name was devised for this mother slime, and it was christened 'bathybius,' from the consecrated deeps in which it lay. The conception ran like wild fire through the popular literature of science, expectant imagination soon played its part. Wonderful movements were seen in this mysterious slime. It became an 'irregular network,' and it could be seen gradually 'altering its form,' so that 'entangled granules gradually changed their relative positions.' The naturalists of the Challenger began their voyage in the full bathy-

bian faith. But the sturdy mind of Mr. John Murray kept its balance—all the more easily since he never could himself find or see any trace of this pelagic protoplasm when the dredges of the Challenger came fresh from bathysmal bottoms. Again and again he looked for it, but never could he discover it. It always hailed from home. The bottles sent there were reported to yield it in abundance, but somehow it seemed to be hatched in them. The laboratory in Jermyn street was its unfailing source, and the great observer there was its only sponsor. The ocean never yielded it until it had been bottled. At last, one day on board the Challenger an accident revealed the mystery. One of Mr. Murray's assistants poured a large quantity of spirits of wine into a bottle containing some pure sea-water, when, lo! the wonderful protoplasm bathybius appeared. It was the chemical precipitate of sulphate of lime produced by the mixture of alcohol and sea-water. This was bathos indeed. On this announcement bathybius disappeared from science, reading us, in more senses than one, a great lesson on 'Precipitation.'"

If dwellers in the atmosphere of pure science are liable to such delusions as this, how can it be otherwise than that mere medical observers should be much oftener and more ludicrously ensnared—as indeed we see they are?

A STRIKING illustration of what can be accomplished for public health by utilizing some of the new steps in science has recently been shown by the diagnosis made in the Carnegie Laboratory, of the presence of cholera germs on board of a steamer just arrived at Quarantine. The steamer was from an Italian port and loaded with emigrants. No case of cholera had occurred during the voyage, but just before the vessel arrived at Quarantine a suspicious case of diarrhoea in a child was noticed. From these dejections sterilized tubes were inoculated and taken to the Carnegie Laboratory and the diagnosis of cholera was made. This diagnosis was confirmed by the speedy appearance of several cases of cholera among the emigrants. But for the test so accurately made cholera germs sufficient to breed a pestilence might have found their way through the hundreds of emigrants not only into the city but throughout the country. The enlightened liberality of Mr. Andrew Carnegie has given to the

city and the nation in the splendidly equipped laboratory which has his name, under its present able management a most powerful safeguard against the pestilence which has more than once desolated our country.

LOOKING simply at the magnificent physical proportions of the Crown Prince of Germany, no one would ever suspect that he had an incurable disease which will terminate his life in, at the most, two or three years. The fact is now perfectly apparent to him that his days are numbered, and the whole civilized world looks with admiration at the bravery with which he meets his fate. Dr. Mackenzie, whose opinion was to a certain extent founded upon the microscopic examination of Virchow, believed for a time the trouble was simply a papilloma of the vocal cords. Perhaps this was really the case and the epithelioma is of more recent date, but all the physicians now coincide that the epithelioma is there and must soon terminate life.

BIBLIOGRAPHICAL.

TREATISE ON HUMAN PHYSIOLOGY FOR THE USE OF STUDENTS AND PRACTITIONERS OF MEDICINE. By Henry C. Chapman, M. D. Philadelphia; Lea Brothers & Co., 1887.

In no department of our profession have greater advances been made during the last decade than in physiology, and we know of no work which presents as complete and intelligent a picture of this department of study at the present time as this one under notice. The work based upon comparative and pathological anatomy, clinical medicine, physics and chemistry, as well as experimental research, represents the methods of investigation through which facts have been obtained and conclusions reached in so clear and comprehension a manner as to be easily understood and remembered. The work bears upon every page indications of careful thought and painstaking scientific investigation.

TRANSACTIONS OF THE FORTIETH SESSION OF THE AMERICAN INSTITUTE OF HOMŒOPATHY, FORTY-FOURTH ANNIVERSARY. Held at Saratoga Springs, N. Y., June 27 to July 1, 1887. Edited by the General Secretary, J. C. Burgher, M. D., pp. 900.

This pretentious volume which covers the transactions of the National Homœopathic Society, contains a great variety of interesting and valuable matter, very little of which is devoted particularly to the special subject to which the society from its title is supposed to be devoted. Ten pages are given up to the consideration of the subject of trituration, and some important facts were brought out by Drs. C. Wesselhoft and L. Sherman. Forty-four pages are occupied by the Bureau of Materia Medica and General Therapeutics in its report on "Remedies Causing Disturbed Sleep," a considerable portion of which cannot be considered as homœopathic. In the report of the Bureau of Clinical Medicine and Special Therapeutics homœopathic treatment is scarcely referred to. On page 85 we read as follows: "On motion of T. F. Allen, M. D., the NEW YORK MEDICAL TIMES was ordered to be stricken from the

list of homœopathic journals." Thus the institute decides that THE TIMES shall be anathema, and it must acquiesce in the verdict as cheerfully as it can. A large number of new subscribers with numerous letters of condolence was the result of this action.

THE MEDICAL NEWS VISITING LIST FOR 1888.

Has been thoroughly revised and brought up to date in every respect. The text portion (48 pages) contains the most indispensable data for the physician and surgeon, including even the latest therapeutic novelties, their doses and effects; while the classified blanks (176 pages) have been rearranged and somewhat condensed, with an obvious gain in convenience. The Obstetric Engagements and Obstetric Practice, for instance, are now together, instead of being separate as formerly. Three styles are now published: Weekly (dated, for 30 patients); Monthly (undated, for 120 patients per month), and Perpetual (undated): so that "The Medical News Visiting List" adapts itself to any system of keeping professional accounts. Each style is in one volume, bound in handsome red leather, at \$1.25. When desired, a Ready-Reference Thumbletter Index is furnished, which is peculiar to this Visiting List, and will save many times its small cost (25 cents) in the economy of time effected during a year.

MASSAGE. Principles and Practice of Remedial Treatment by Imparted Motion. Mechanical Processes. By Geo. H. Taylor, M. D., author of "Health by Exercise," "Health for Women," "Pelvic and Hernial Therapeutics," &c. New York, John B. Alden 1887; pp. 174, 12mo.

Dr. Taylor, the author of this little work, devised and has employed for many years a system of mechanical massage of which this book is illustrative. We have personally advised Dr. Taylor's treatment in a large number of cases, and with a good percentage in favor of the results. The profession should be familiar with these methods and the best way to ascertain them is to procure this book which gives an exposition of the *modus operandi*.

ANATOMY, DESCRIPTIVE AND SURGICAL. By Henry Gray, F. R. S. Fellow of the Royal College of Surgeons; Lecturer on Anatomy at St. George's Hospital Medical School. The drawings by H. V. Carter, M. D., late Demonstrator of Anatomy at St. George's Hospital, with additional drawings in later editions; edited by T. Pickering Pick, Surgeon to, and Lecturer on Surgery at St. George's Hospital; Senior Surgeon, Victoria Hospital for Children; Member of the Court of Examiners, Royal College of Surgeons of England. A new American from the eleventh English edition, thoroughly revised and re-edited with additions by William W. Keen, M. D., Professor of Surgery in the Woman's Medical College of Pennsylvania; Professor of Artistic Anatomy in the Pennsylvania Academy of the Fine Arts, formerly Lecturer on Anatomy in the Philadelphia School of Anatomy; Surgeon to St. Mary's Hospital; Fellow of the College of Physicians, Philadelphia, &c. To which is added Landmark's Medical and Surgical. By Luther Holden, F. R. C. S., with additions by William W. Keen, M. D. Philadelphia, Lea Brothers & Co., 1887; pp. 1100.

In the present edition of this old familiar text-book, the alterations are considerable.

The introduction has been entirely rewritten to accord

with present research, and it has been incorporated into the body of the work.

The text has been carefully revised, corrected, and such alterations made in the arrangement as seemed of practical utility to the student.

The arteries, veins and nerves, in the wood-cuts have been colored, which gives additional clearness to the illustrations and must enhance the value of the work. Purchasers should be sure to get the latest edition as it is a considerable improvement over any other. The book is too well-known to require any extended notice of its merits.

THE STUDENTS' GUIDE TO DISEASES OF THE EYE. By Edward Nettleship, M. D., with a chapter for color perception by Wm. Thompson, M. D. Philadelphia; Lea Brothers & Co., 1887.

The author says in his preface "the aim of the little book is to supply students with the information they most need in diseases of the eye during their hospital course." The fact that the present edition is the third American from the fourth English edition is proof that the author has presented his subject in such a manner as to interest and instruct.

THE HOMŒOPATHIC VISITING LIST, edited by Dr. Faulkner, and published by Bericke & Tafel, has been so long before the profession, and has given such entire satisfaction that it is only necessary to announce its issue for 1888.

THE ARCHIVES OF PEDIATRICS which, as our readers are aware, fills a very important niche in journalism, will commence, we are informed, in its January issue a series of articles running through the year, and containing ten or twelve pages in each monthly issue, by A. Jacobi, M. D., on the "Therapeutics of Infancy and Childhood." Dr. Jacobi's acknowledged ability as a writer and clinical teacher always insure his utterances in the public journals a large and attentive hearing.

The following works will be issued during December by the New York publishers, Leonard & Co., 141 Broadway: "Diseases of Women," a work based upon the practical experience and teachings of the following eminent gynecologists: Drs. Thomas, Munde, Hunter, Lusk, McLane, Skene, Garrigues, Barker, Emmet, &c., 436 pages. Cloth, \$1.50. "Diseases of Infancy and Childhood," with over 400 formulæ and prescriptions, by Drs. Jacobi, Hammond, Flint, Loomis, Janeway, Bulkley, Agnew, &c. 300 pages. Cloth, \$1. "Diseases of Heart and Lungs," with over 350 formulæ and prescriptions, by Drs. Draper, Delafield, Leaming, J. Lewis Smith, Loomis, Clark, Janeway, &c., 204 pages. Cloth \$1.25. "The Archives of Gynecology," which furnishes a resume of the leading articles of the best gynecological journals, is published by the same house at three dollars per year.

The very excellent handbook of diseases of the skin, with special reference to diagnosis and treatment, by Robert Liveing, M. D., published by Longmans, Green & Co., condenses into a small space an immense amount of information in so clear a manner as to be easily remembered and utilized.

CORRESPONDENCE.

WANTED: A NEW MEDICAL SOCIETY:

From a Homœopathic Standpoint.

To the Editors of THE NEW YORK MEDICAL TIMES:

As a homœopath I desire to second the proposition of your Old-School correspondent in reference to the desirability of a new, unsectarian medical society.

The growing popularity of the school of medicine with which I am connected is shown by its large clientele among the wealthy and educated classes, by state recognition in boards of health, and by national and state aid to hospitals, insane asylums and other charities. Hence any desire to lose our identity as a sect cannot be ascribed to mercenary motives.

It seems to me that this very prosperity can but intensify and tend to perpetuate the division in the medical world which, in common with your Old-School writer and all other unprejudiced seekers after truth, I deprecate.

It is evident, to most minds, that the time will never come when all Old-School practitioners will call themselves homœopaths, and it is equally true that, as at present constituted, the Old School will never absorb the New.

The reason for this is that each school contains a part of the truth which it asserts as the whole truth, and it is only when brought together that these parts are seen to be complementary and that taken thus they indicate the true path to a scientific conception of therapeutics.

That I may not misrepresent nor be misrepresented I will state briefly my own medical belief and methods of practice.

I am an alumnus of the oldest medical college that is connected with the New School. I believe in use of drugs on the "principle of similars," and treat the majority of my cases in accordance with that principle; but I also believe in all other therapeutic measures that have been proved efficient, and hence prescribe drugs in combination or for their physiological action, as I may deem them indicated.

In other words, I am bound by no creed but glean from the general field of medicine, and because of this fact am entitled to be known as a physician in the broadest sense of the term. In consequence of the present attitude of the Schools I am forced to be known as a homœopath.

The Old-School, in spite of its non-sectarian claims, is really intolerant of those who are liberal-minded enough to embrace all of therapeutics, including the principle or rule of similars. It has arrayed itself as a sect against the homœopaths and would refuse to recognize me as a graduate of an accredited medical college.

The New School has become more liberal and now welcomes all who admit the principle of "similia" to be a part of therapeutics and then allows the use of all the resources of medicine.

It thus happens that many men are known to the world as homœopaths—sectarians whose practice is as broad and unsectarian as medicine itself.

Some of these are contented, but there are others who dislike to occupy the irrational position which they are forced to assume.

There are liberal minds in the Old School with whom we would gladly fraternize, and who would reciprocate the feeling were it not for the artificial restraints by which both are surrounded.

With your Old-School correspondent I think that the

remedy for the existing evil is to be found in a new medical society in which sectional lines and codes shall have no place. I know of no better time than the present, nor of those more fitted to inaugurate the movement than the editors of the *NEW YORK MEDICAL TIMES*.

For the above reasons the proposition meets with my hearty approval. NEW SCHOOL.

[There is a natural shyness on the part of members of both schools toward the proposition for a new society. We see no reason why *The American Institute of Medicine* should not be started as a nucleus by those who feel as both our correspondents appear to in the matter, and with whom we are in sympathy, and if our correspondents and others will suggest a plan by which it can be inaugurated we shall be glad to further the object in any way we can. It seems to us that a meeting for this purpose might be called in this city, perhaps in January next, at which the first step could be taken. Let us hear from other sympathizers.—Eds.]

WET COTTON AND SANITATION.

To the Editors of THE NEW YORK MEDICAL TIMES :

Two cases have recently been the subject of a Naval Court of Inquiry, in Savannah, which, from sanitary, legal and commercial interests involved, have been much discussed and strongly contested. The facts in the case are briefly these: A few weeks ago a fire broke out on an English tramp steamship, *The Resolute*, loaded with about 5000 bales of cotton, bound for Liverpool and ready for sea. This fire necessitated the complete flooding of the cargo, which had to be unloaded. In the week spent in its discharge a very foul odor was generated which penetrated the entire vessel, and which made any prolonged stay in the ship's hold almost impossible. The crew suffered much from this stench; they complained of nausea and dizziness, and even vomiting; the bilge-water was especially foul; in the tunnel through which the shaft passes, and which is supposed to be water-tight, the air was so mephitic that a Davy's safety-lamp would not burn; forward in the fore-castle the crew found it impossible to sleep from the stench arising through the chain-pipes. When the ship had been discharged and was ready for reloading the crew and officers stoutly refused to ship with this wet cotton on the ground that their lives were in danger, and they petitioned the authorities to support them in their protest. The captain alone, for personal reasons and as representing the ship's owners, had to take an opposite stand, though from what I could learn he was in sympathy with the crew.

Here was a question demanding considerable attention, involving, as it did, a good deal of money and the establishment of a precedent for future cases of the kind, let alone any sanitary considerations. Two physicians gave it as their opinion that there was no danger from the transportation of such a cargo across the Atlantic. With these two exceptions the medical men who inspected the cotton testified to the dangers to the crew from such a cargo, and justified the crew's action in the case. As one of the physicians called upon I felt compelled after an examination of the cotton to testify in strong terms to its unfitness for transportation. A careful inspection showed a large mass of vegetable matter undergoing degeneration with the production of a very foul odor and considerable heat, conditions which, from a sanitary point of view, must condemn it, if sanitary science is right in its first commandment to remove and destroy decomposing organic matter.

The cotton fibre itself is not so quick to decompose; it is largely the vegetable debris left in the bales despite the ginning. This debris consists of cotton seeds and other foreign vegetable matter. Many of these seeds near the surface of the bale were germinating, and innumerable little cotton plants were seen growing. These bales when opened showed that the water had thoroughly penetrated them, and the rank odor and green spots throughout showed the decomposition going on. The heat generated was very marked; walking over the tops of the bales the heated and fetid air was very apparent.

Shortly after the fire on *The Resolute* another fire broke out on an English steamship, *The City of Naples*, necessitating almost a complete flooding of her cargo of several thousand bales of cotton. The crew experienced the same difficulty in the discharge of this cargo. The cotton here showed even more germination and decomposition; innumerable toad-stools were growing from the bales, and in many places where the bales touched a slime developed containing myriads of vegetable spores. In many places the cotton was "bogged," having lost its fibre and becoming a pulaceous mass when rubbed between the fingers.

A Court of Inquiry in the case of each steamship, after a long discussion and the weighing of much testimony, decided in favor of the crew.

This is the first time that cases in any way similar have occurred in Savannah, though a large cotton-port; while fires have broken out aboard vessels loaded with cotton the cargoes have been discharged and sold on the spot.

It has been found that cotton exposed to the rain is practically uninjured, as the water permeates but a short distance and the cotton dries before there is any chance for decomposition. But when cotton is deluged with large quantities of water, or stands for any length of time in it, it becomes thoroughly soaked, when decomposition sets in with the production of heat and a foul odor. These cotton bales, however tightly packed, are not entirely cut off from atmospheric air, and in a trip of eighteen days across the Atlantic these processes of decomposition increase, producing effluvia which must penetrate all parts of the ship. That such a cargo is a danger to the crew, not to mention the dangers to the port where it is discharged, hardly admits of a doubt.

I have not been able to find any case on record where a cargo of wet cotton has produced sickness on board; cargoes of wet hemp have been refused before, and the importation of disease through cargoes of rags has been definitely established. Aside from this evidence the general principles of sanitary science should lead us to condemn such a cargo. The fact that the crew themselves stoutly resisted shipping with this wet cotton shows, I think, that its dangers were very apparent. The life of the sailor is a hard one at the best, and he becomes inured to hardships and rough living which would appal most landmen; but he must draw the line somewhere. Sanitary science can do much to improve his condition and she should avail herself of every opportunity of protecting him from dangers which are preventable, and not allow gold to outweigh blood.

I shall be glad if any of your readers can adduce any facts to substantiate the verdicts reached in these two cases.

Respectfully,

SAVANNAH, Ga.,
Nov. 10, 1887.

E. R. CORSON, M. D.

OBITUARY.

The sudden death from apoplexy in this city, Oct. 26th, of Dr. John M. Carnochan, at the age of 70, has removed almost the only link between the great surgeons of the past generation and the present. Dr. Carnochan was a native of Charleston, South Carolina, the son of a rich planter, and traced his descent back on his father's side through a long line of illustrious Scotch ancestors, and on his mother's side to the family of General Israel Putnam, of Revolutionary fame. After graduating at the University of Edinburgh with honors he entered the office, as a medical student, of Dr. Valentine Mott, then the most distinguished surgeon in the world. Subsequently he spent several years in the careful study of his profession in Paris, London and Edinburgh, which were then the great centres of medical study. In 1847, he established himself in New York and soon became prominent as a skillful and original surgeon, and for the thoroughness and accuracy of his medical and surgical diagnoses. Dr. Carnochan organized the Emigrants' Hospital, Ward's Island, and during the twenty-one years he filled the position as its Surgeon-in-Chief, it was the largest and most successful hospital in the United States. Dr. Carnochan was at one time Professor of Surgery in the New York Medical College, and during the administration of Governor Hoffmann, Health Officer of the Port of New York. Desirous of leaving some enduring record of his life's work, he had completed and published through the Harpers, at the time of his death, about half of a work which was intended to include his leading operations, and in connection with them those questions of pathology to which his mind had been specially directed. His dissertation in this volume on shock and collapse is the most original and important presentation of that subject yet given to the public. The work already published, although only a part of what was intended, is still complete in itself, and will form an enduring monument to the great surgeon of whom a contemporary, Dr. Gross, said, "he has performed more original operations than any other surgeon." In Dr. Carnochan's intense dislike of shams and his high appreciation of professional obligations, he incurred the hostility of many in the Old School whose limited ideas of professional honor, and whose narrow bigotry caused them to confine all professional intercourse within the circle of a sectarian ring and to boycott those who dared act with the independence and honor worthy of a great profession. For years J. M. Carnochan, A. K. Gardner and Dr. Hossack were the only men in the Old School in this city, who had the honor and manliness to place their professional skill at the service of the New School whose attention had been so thoroughly engrossed in therapeutics that they had no other specialists in their ranks. Dr. Carnochan lived long enough to see the great principle for which he contended, approved and endorsed by the leading men in his profession throughout the world. In originality of thought, in beauty of diction as a writer, and in correctness of judgment and delicacy of touch and skill as an operator, and in thorough loyalty to his professional friends, Dr. Carnochan had no superior. It was well said of him that always ready for any emergency, his greatest triumphs were not in his operations but in the lives he had saved without the knife.

Dr. Geo. W. Blodgett, late Professor of Physiology in the New York Homœopathic Medical College, died after a short illness on November 28th last. Dr. Blodgett was a young man of much promise, and his early demise is a great loss.

TRANSLATIONS, GLEANINGS, ETC.

The Dangers of Foot-ball.—From a profusely illustrated article in the October *Century* by Alexander Johnston we quote the following: "The game is as safe as any outdoor game can well be, provided it is played with the careful preparation and training which are the rule in the larger colleges; it is a dangerous and unfit game when men undertake to play it without such preparation and training. In the season of last year, two fatal accidents were reported; both occurred in colleges which were attempting to play the game as it is played by the leading teams, without any of the preparation which they find an essential. The 'University team' is selected provisionally; it is pitted daily against a second, or 'scrub,' team of somewhat larger numbers; both teams are kept under careful training and supervision; the playing is made short and as gentle as possible at first, until the men begin to become 'hard;' the playing is then gradually lengthened and made more severe, as the men become able to endure it; and, by the time the season comes to its last game, the players are able to endure with impunity treatment which would be dangerous to men who are 'soft,' or out of condition. The players are not only brought to a point of physical condition which makes it a pleasure to watch them; they are taught how to fall, when a fall is inevitable, in such a way as to retain control of the ball without hazarding a broken bone or a dislocation. The preliminary practice games can hardly be more severe elsewhere than at Princeton; and yet the writer has never seen a serious accident occur there. With good physical condition in the players, the requisite training, and suitable grounds, the game is not only one of the best of outdoor sports, but one of the safest."

Is Consumption Contagious?—After the study of nearly twelve thousand cases, Dr. Herman Brehmer, an able German physician, rejects the theory of the contagiousness of pulmonary consumption. He finds the disease to be due to deficient nutrition of the lung, which may result from many causes. He believes that the operation of all the causes may produce such changes that it may be possible, years in advance, to predict with great probability which members of a family will be afflicted with pulmonary consumption and which will remain healthy.—*Medical Herald.*

A New Source of Sugar.—A report comes from the East which is of great importance, if true. It is that there has been discovered in British India a blossom of such saccharine properties that it is destined to revolutionize the sugar business of the world. It is the flower of the mahwa, or moola, a tree of large size, which abounds in the southern portion of Hindostan. This blossom has a sweet taste and yields one-half its weight in sugar.

A Peculiar Form of Motor Disturbance of the Pupil.—Salgo (*Med. News*) describes a peculiar form of pupil, which consists essentially of an irregular contraction of the muscular tissue of the iris, by which its pupillary margin assumes many different shapes. The pupil generally appears triangular or poliangular, with the corners thickened and rounded out, resembling somewhat the slit-like pupil of the cat or the irregular appearance caused by synechia. This kind of a pupil reacts in a normal manner, but after

each movement assumes a somewhat different form, so that the contracted pupil appears different from the same when dilated. The great majority of cases so far observed have been associated with general paralysis of the insane, though it has been seen in chronic progressive psychoses, in which no paralysis could be detected. The author considers that it is much the most frequent pupillary symptom in general paralysis, and regards it as an expression of the vary intensity of innervation from the cortex.

A Case of Suture of the Sciatic Nerve.—Eighteen months after operation was also reported. There had been a gradual return of sensation and motion in the foot and rapid healing of two large and troublesome ulcers on the outer border of the foot.

A New Thermometer.—Dr. Daniel Draper, of the Central Park Observatory has constructed a thermometer which will mark the temperature upon a chart or dial with the accuracy with which the sphygmograph gives the tracings of the heart's action. The instrument consists simply of a metallic bar made of copper and steel which by the alternate contraction and expansion of heat indicates the temperature and registers it on a paper disc with a pointer supplied with aniline ink from a reservoir at its extremity.

Insane Rulers.—King Otto, the second in direct succession of the hereditary lunatics of Bavaria, has again drawn attention to his mental infirmities by creating a scene outside of his prison. The unfortunate monarch was allowed to go for a walk with a single attendant—like his predecessor, Ludwig, on the occasion of the latter's suicide—without the walls of Castle Furstenried park. In the public road the demented king threw himself on his knees, and, declaring that he was in paradise, refused to return to the castle, and it was necessary to resort to force to get him back to his prison.

A census of insanity among kings would doubtless show a greater proportion of lunatics than in any other rank or calling. George III., of England, was a mad man. The mind of Paul I., of Russia, was unbalanced, and it is generally believed that his two sons, Nicholas I. and Alexander I., were mentally deranged during their reigns upon the Russian throne. Numerous Eastern monarchs have also become mad upon their thrones, and it is, doubtless, a fact that many of the brutal and wanton deeds that have been ascribed to the cruelty of kings in the past were in reality due to insanity, that would be recognized as such at the present day.

Of course, the intermarriage of families among royalty has much to do in bringing about these melancholy results, while the fact that the mind of a king cannot of necessity take a normal level from the responsibility that rest upon his shoulders is a contributory factor.

It would seem more extraordinary, almost, if the mind of Alexander III., of Russia, in view of the hereditary taint of insanity in the Romanoff blood, should be able to withstand the strain that is at present upon it than if it gave way under it. The fate of his father is ever before his eyes, and he does not know what moment the same fate may be his, and yet he is planning great conquests and is the absolute monarch of the greatest empire upon the face of the globe and the arbiter of the destinies of

more than 100,000,000 people. Added to this is the fact that his son and successor is growing up a witless youth and is besides affected with consumption. The czar's hallucination is said to be a distrust of everybody, even his most faithful and tried courtiers, and a fear that any member of his household may be a nihilist awaiting an opportunity to take his life. The recent death of Count Reutern at the hands of the czar, in the palace, is a sufficient proof of the existence of this hallucination.

Homœopaths' Opinion of Homœopaths.—At the opening ceremonies of what is to be known as the "Hering Building" of an hospital established by the "Women's Homœopathic Association of Philadelphia," one of the speakers thus referred to the large number of so-called homœopaths who look one way and now another: "This occasion gives us joy because it occurs in the interests of truth and uprightness—truth as opposed to ignorance and falsehood; uprightness as set against cowardice and dishonesty. Long enough has the spurious been passing for the genuine. For long has public confidence been misled and the community deceived; and now, through the stand which the management of this hospital has taken, and which this event celebrates, you cause us to hope that the cloud is to be lifted from the hearts of those who have long deplored a state of things they were powerless to change. Hahnemannian homœopathy is to be the rule of practice in this institution. The unmixed and pure law is to have full sway. The weights of stupidity and duplicity that have so often and so long hindered the soaring aloft of this wonderful truth have been cast away."

This is plain enough; and we wish its significance could be grasped by the community so that those who call themselves homœopaths, but are not such, could be separated from those who are homœopaths sincerely and consistently. Then we should see what the latter could do without getting surreptitiously help from the practices of the regular practice.—*Med. and Surg. Reporter.*

Hager's Catarrh Remedy.—Has gained quite an extensive popularity in incipient cold in the head and chronic catarrh. The formula is, carbolic acid and alcohol each ten parts, aqua ammonia twelve parts, and distilled water twenty parts. A two-ounce wide-mouthed bottle is filled one-third with this mixture, and enough absorbent cotton introduced to absorb the whole. The bottle is then corked and is ready for use by inhalation.

How to Choose a Doctor.—To be a doctor, one must first be a man, and a mean man cannot be a good doctor any more than he can be a good minister or a good husband, and a really honest, large and loving man cannot make a poor doctor, no matter what his pet party may be. To have good sense as a doctor, one must have good sense as a man. If your doctor is a nincompoop about other things you may be sure that he is a ninny as to medicine and surgery. If the doctor's office is untidy and vile to smell of, you may be quite certain that he will come short of giving good counsel as to health and tidiness of body. If he be clumsy in hitching his horse you may be sure that he is not handy at surgery midwifery. If he be a great, coarse, blundering fellow, careless of dress, a two fisted, farmer-looking man, you may be sure he will lack perception of those finer symptoms by which a good doctor is guided. If he slanders brother physicians who profess a different

party, you may be sure that he is himself a quack. Good earnest doctors are too busy to find time to slander their brethren or their rivals. It is all the same with lawyers, ministers and teachers. The truly good and truly great do not detract from the reputation of others, and they are generous and magnanimous even to rivals. If your doctor flatters you, and humors your lusts and appetites, and helps you out of a bad scrape secretly, without reproof, as if you had done no wrong, distrust him. If you can hire him to do or say what he would not do without the hire, beware of him. Good doctors cannot be bought. Your doctor ought not to be a single man. He ought to have a wife and children, and if you see that his wife respects him, and his children obey him, that is a very good sign that he may be trusted. If your doctor tells you how to keep well, that is a good sign. You come to him with the toothache; he gives you creosote and clove oil for the tooth, and at the same time suggests that you do not wash enough to keep well—that is a good sign. If the children like him, that is a good sign. If you find him reading in his office, that is a good sign, especially if he be a settled middle-aged man. If you hear him say: "I once thought so and so, but I was wrong," that is a good sign. If the doctor is neat and handy in rolling pills and folding powders, that is to his credit as a surgeon. If he understands how to bud roses, graft fruit trees, mix strawberry pollen for improved berries, cure chicken pip, and tinker a trunk lock, or put a clock in order, all these are so much to his credit. If, further, you love to meet him, the sight of him quickens you, and you are glad to hear him chat, and you know him to be a lovable, sympathetic man—he's the man for your doctor, your confidential friend; find him, trust him—BEECHER.—*Ind. Prac.*

Cerebral Localization (*Hun. Jour. Med. Sciences*).—From a series of cases the author draws the following conclusions:

1. The greater part of the cerebral cortex can be divided into small areas, each of which is functionally associated with a definite mode of mental action, and is consequently called the cortical center for that action.
2. The cortical centres connected with the sensory nerves are situated in the posterior half of the cerebral cortex including the temporal lobe, and the cortical centers connected with the motor nerves are situated in the middle portion of the cerebral cortex and in the posterior part of the cortex of the anterior lobe.
3. Each sensory cortical center probably consists of two parts; a smaller one in which the peripheral nerve has its final termination, and in which takes place those molecular changes which correspond to simple sensation, and a larger one in which takes place those molecular changes which correspond to the mental processes of memory, judgment and comparison, which together constitute complete perception and recognition.
4. Each motor cortical center probably consists of two parts; a smaller one in which the peripheral motor nerve has its origin, and in which take place those molecular changes which correspond to the action of the will in originating voluntary movements, and a larger part in which take place those molecular changes which correspond to the memories of co-ordinated muscular innervation, which are factors in the production of voluntary movements.
5. The optic fibres from the right upper quadrant of each retina terminate in the lower half of the right cuneus.
6. The optic fibres from the right lower quadrant of each

retina terminate in the adjacent part of the right median occipito-temporal convolution.

7. The lower half of the cuneus and the adjacent part of the median occipito-temporal convolution is the point of termination of the optic fibres from homonymous halves of the retinae, the right half of each retina being represented in the right occipital lobe, and the left half in the left lobe.

8. Functional activity of the cortex of the median surface of the occipital lobe is necessary for simple visual sensation.

9. Functional activity of the cortex of the convex surface of the left occipital lobe is necessary for full visual perception and recognition and for the production of visual memories.

10. The temporal lobe is the cortical center for hearing, and complete destruction of a temporal lobe or of the auditory fibres running to it causes complete deafness of the opposite ear.

11. Functional activity of the cortex of the left superior temporal convolution is necessary for the perception and recognition of spoken words and for the production of the memory of these words, lesions of this part causing inability to understand spoken words and sensory aphasia.

12. Functional activity of the cortex of the left angular convolution is necessary for the production of memories of the appearance of written or printed words, lesions of it causing alexia and agraphia.

13. Only in virtue of the fact that an its functional activity depends the production of the memories of the appearance of written or printed words can the angular convolution be considered as forming part of the visual center. It does not constitute the visual center as Ferrier claims.

14. The cortical center for the leg includes the paracentral lobule, the upper third of the two central convolutions, and the greater part of the superior parietal lobule.

15. The cortical center for the arm includes the posterior part of the superior frontal convolution, the middle third of the two central convolutions, and the anterior part of the inferior parietal lobule.

16. The cortical center for the face includes the lower third of the two central convolutions, especially the anterior one.

17. In the anterior part of the cortical center for the arm originate the nerve fibres for the arm, and lesions of this part cause absolute paralysis of the arm. The same thing is probably true in the case of the cortical centers for the leg and face.

18. In the posterior part of the cortical center for the arm take place those molecular changes which are necessary for the production of memories of co-ordinated muscular innervation. The same thing is probably true of the cortical centers for the leg and face.

19. No sharp line can be drawn between the motor centers of the leg, arm and face of the same side, and it is very possible that in each center all three parts may be more or less completely represented.

20. The cortical centers for muscular and cutaneous sensibility are the same as those for motility, and probably extend backward beyond the latter over the parietal lobe also.

21. The faculty of speech cannot be located in any one portion of the cortex, and aphasia can be produced by a lesion situated in various parts of the left hemisphere, the right hemisphere (cerebral) apparently not being concerned in the production of speech except in the case of left-handed persons. The memories of the muscular innervation feelings necessary to produce spoken words depend on the functional activity of the cortex of the left inferior frontal

convolution. The memories of the sound of words depend on the functional activity of the cortex of the left superior temporal convolution. The memories of the appearance of written or printed words depend on the functional activity of the left angular convolution. These centers are all connected together by means of association fibres. The faculty of speech in its completeness depends on the integrity of all these parts, except, perhaps, that of the angular convolution. According as one or the other of these parts is affected the symptoms of one or the other of the principal varieties of aphasia are produced. Motor aphasia is due to a lesion of the left inferior frontal convolution or of the white matter immediately beneath it. Sensory aphasia is due to a lesion of the left superior temporal convolution, perhaps also to a lesion of the left angular convolution. Conduction aphasia is due to a lesion of the association fibres mentioned above.

22. Tumors or other irritative lesions situated in the non-motor region of the cerebral hemispheres can cause general convulsions associated with loss of consciousness.

23. Tumors or other irritative lesions situated in the cortical centers for the leg, arm or face, may cause convulsions commencing in the leg, arm or face, respectively, and which may become general, though they more frequently remain unilateral, and which are sometimes associated with loss of consciousness and sometimes not.

24. Tumors situated in the cortical center for the leg may produce a trance-like condition, or conditions resembling the attacks of petitmal of epileptics.

MISCELLANY.

—Dr. Duncan, in the *London Lancet*, gives three cases of entire relief from vomiting in uterine pregnancy by painting the roof of the vagina and the cervix with a 15 per cent. solution of cocaine. In one case the vomiting returned after a week when a small plug of cotton wool soaked in the solution was introduced into the cervix for a few moments. The vomiting did not again return.

—Dr. Jonathan Hutchinson says he has never failed to relieve hemorrhage from the nose by immersing the feet to the knees in water as hot as it can be borne.

—Dr. Harmer Smith, in the *Homœopathic World*, gives an interesting case of eczema with violent itching, which was cured by one-quarter grain of chloral hydrate given every four hours. The excessive use of not only chloral but bromide of potassium is often followed by an eczematous eruption which under Hahnemann's rule may give us a clue to their use in certain conditions of eczema.

—Prof. Bartholow says Gelsemium will often do more good in irritable bladder than any other remedy. It is especially adapted to those women of hysterical type troubled by irritability at the neck of the bladder calling for constant urination.

—Amylene hydrate is said to be in doses of a drachm an admirable soporific, producing six or eight hours' sleep without after unpleasant results.

—The chairman of the Bureau of Gynecology of the American Institute of Homœopathy, Dr. Phil. Porter, has selected as the general subject for discussion at the meeting in 1888 the subject of Uterine Therapeutics, under which head is included "Changes in Form and Position of the Uterus; Neoplasms of the Uterus; Nutritive Disturbances."

—Hydrate of turpina, which has lately become a favorite in the treatment of winter catarrhs and bronchitis, is furnished in tablet triturates of one grain, and compressed to three grains. As they are without taste the administration is easy.

—Solution of chlorinated lime, one ounce with two drops of acetic acid, is used in many offices to remove ink from parchment or paper. Apply a drop of the solution to the paper without rubbing; when the ink has disappeared the fluid is taken up with the blotter.

—Hydriodic acid, which has been found of great use in the treatment of locomotor ataxia, and many other troubles, can be easily made by combining sixty-eight grains of iodide of potassium, sixty grains of tartaric acid and half an ounce of water. Let it stand surrounded by ice for two hours, then decant 200 minims of the clear liquid and mix with four ounces of simple syrup. Each teaspoon contains half a drop of hydriodic acid.

—The *Virginia Medical Monthly* says fifteen grains of boric acid to an ounce of water, applied with a brush to a sty three times a day, will cause it to speedily disappear.

—Dr. Schadeck in the *London Lancet* says he has obtained astonishing results from the use of carbolate of mercury in syphilis. Sixty grains of the hydrarg. carb. ac. is combined with sufficient pulv. legavrin to make a mass which is divided into twenty pills, one of which is given three times a day.

—Dr. Kirk, of Edinburgh, says by carefully observing the umbilicus of a child it can be determined if it was born alive. If the child lives an hour after birth there will be a slight circle of inflamed tissue about the insertion of the cord. This zone becomes more pronounced every hour after birth. If his conclusions are correct they will be of great medico-legal importance.

—Dr. Howe of Buffalo says there is a very great increase of blindness which he attributes to the introduction by immigrants of cases of contagious diseases of the eyes.

—Dr. D. J. Roberts, late of the House Staff, W. I. Hospital, has settled at New Rochelle, N. Y.

—Our thanks are due to our old friend Dr. C. B. Currier, Dean, &c., for an invitation to attend the fourth annual Commencement of Hahnemann Medical College, of San Francisco. We can only send our regrets and best wishes!

—Dr. F. S. Bradford, in consequence of his health, has removed to Morristown, New Jersey, where he will devote himself especially to diseases of the lungs and heart, etc.

—Dr. Strong, chief of staff of the W. I. Hospital, reports 765 patients under treatment during the month of October, mortality, 2.87 per cent.; total under treatment since January 1st, 3303, mortality 6.63 per cent. The 150 insane, which for many years occupied a portion of the building, have been removed and their places taken by hospital patients.

—Dr. O'Hanlan, of the Gouverneur Hospital, reports a case of œdema of the lungs which was relieved by turning the patient flat on the chest with the head hanging down. The serum flowed from the mouth and nose, and the breathing was promptly relieved.

—Dr. Jackson says the preliminary washing the parts with soap and water before using cocaine should be avoided, as the alkali of the soap prevents anæsthesia.